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FINAL REPORT
COMPLIANCE EVALUATION INSPECTION
ELI LILLY INDUSTRIES, INC.
MAYAGUEZ, PUERTO RICO

10/21/87

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460

EPA Work Assignment No.	: 591
EPA Region	: II
Facility I.D. No.	: PRD091024786
Contract No.	: 68-01-7331
CDM Federal Programs Corporation Document No.	: T591-R02-FR-CDLN-1
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Date Prepared	: July 5, 1988

(CEI2/15)

COMPLIANCE EVALUATION INSPECTION REPORT

Facility Name:	Eli Lilly Industries, Inc.
Mailing Address:	P.O. Box 1748 Mayaguez, Puerto Rico 00708
Facility Contact:	Gabriel Garcia (809) 834-7846
Facility Location:	Road No. 2 KM 146.7 Bo Sabnetas Mayaguez, Puerto Rico 00708
USEPA ID NO.:	PRD 091024786
Inspection Participants:	John Mihalich, CDM Federal Programs Corporation Scott Graber, CDM Federal Programs Corporation Gabriel Garcia, Eli Lilly Industries, Inc.
Purpose of Inspection:	The purpose of this inspection was to evaluate Eli Lilly Industries, Inc. compliance with applicable RCRA regulations.
Inspection Date:	October 21, 1987
Applicable Regulations:	40 CFR Part 262 40 CFR Part 265 40 CFR Part 266 40 CFR Part 268

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1.0 INTRODUCTION

In accordance with RCRA policy, commercial hazardous waste generator and/or treatment, storage, and disposal (TSD) facilities are subject to Compliance Evaluation Inspections (CEI) which address facility environmental concerns. The inspections involve evaluating compliance with all applicable 40 CFR 262 through 268 standards. The inspections include the facility's implementation of the land disposal restrictions which were promulgated on November 7, 1986. As of November 8, 1986 spent solvents listed as F001, F002, F003, F004, and F005 cannot be land disposed unless they meet certain treatment-based standards. In addition, if the facility generates California-listed hazardous wastes, it must comply with the land disposal restrictions promulgated on July 8, 1987.

Under TES III Work Assignment 591, CDM Federal Programs Corporation (CDM FPC) was contracted to conduct a CEI at Eli Lilly Industries, Inc. (Eli Lilly) in Puerto Rico. CDM FPC visited Eli Lilly on October 21, 1987 to conduct the CEI. The information contained within this report was obtained from facility personnel and on-site record's during the CEI, except where referenced otherwise.

The CEI was conducted using the RCRA Inspection Form. The evaluation of compliance with the land ban restrictions was conducted using the RCRA Land Restriction F-solvent checklist. This and other relevant documents are attached to this report.

2.0 SITE BACKGROUND

2.1 FACILITY DESCRIPTION AND OPERATIONS

Eli Lilly, which began operations in 1968, is a pharmaceutical company located in Mayaguez, Puerto Rico on approximately 33 acres of land. In addition to generating hazardous waste, Eli Lilly treats and stores hazardous waste and is an interim status TSD facility. Eli Lilly also operates 3 separate generator facilities which are located in Carolina, Puerto Rico. This report deals exclusively with the Mayaguez TSD plant.

Eli Lilly manufactures 5 separate products in 4 reaction buildings, which are product specific to prevent contamination. Both buildings #3 and #6 produce two analgesics, one of which is Darvon, and one hypoglycemic. Building #13 produces Cafelex, an antibiotic. Building #17 produces Elosen, which is also an antibiotic. Eli Lilly is responsible only for the final stage of production of the antibiotics. Solvents are used as catalysts for chemical reactions during the intermediate stages of production of the analgesics and the hypoglycemic.

There is an incinerator, a wastewater treatment plant (WTP), a tank farm, and a hazardous waste storage area (HWSA) for drums onsite.

2.2 HAZARDOUS WASTE GENERATION

Solvents used as catalysts during Eli Lilly's operations include toluene, acetone, methyl and ethyl alcohol, hexane, ethyl acetate, di-ethylene, and tri-ethylene. Sodium hydroxide, hydrochloric acid (HCl), and acetic acid are also used as chemical carriers.

Solvents are recovered by a distillation unit, whose still bottoms are stored and burned on-site. Acetonitrile and methylene cyanide are released during the recovery process, stored in tanks, and shipped off-site.

Organic, acidic, and caustic wastes are all sent to the WTP, provided their chemical oxygen demand is <10,000 ppm. This includes all solvents except toluene and xylene. Treated water is discharged to the Publically Owned Treatment Works (POTW) system.

There are 5 tanks onsite, 2 of which store "hot" waste (i.e. rich in solvents) and 3 of which store "cold" waste (i.e. rich in salts). (See Exhibit 1 for examples of "hot" and "cold" waste.) The hot waste has a high organic concentration of approximately 15,000 BTU/lb, while cold waste has a concentration of approximately 3,000 to 5,000 BTU/lb. The tanks are cleaned every 2 to 3 years. The tank sludge from the cleaning is removed, stored in drums, and shipped off-site.

From the storage tanks, hazardous waste is sent to the incinerator (Air Permit No. PFE-50-1084-0773 I-II-III-0). As of 1972, 95% of Eli Lilly's waste is incinerated onsite. Only 5% is stored in drums and shipped off-site for disposal. Material burned includes extractions, separations, distillations, and centrifuge mother liquors from the WTP. Off-specification material from production and oil from boilers are also incinerated. Incinerator scrubber water is released to the Anasco River, as per Eli Lilly's NPDES permit (number PR0000353).

Calcium carbonate, ammonia (pH of 12), and sodium hydroxide (pH of 14) are not burned because of strict control of the pH material to be burned. These materials are neutralized at the WTP.

Wastes from Eli Lilly's Carolina plants are occasionally sent to the Mayaguez facility here for storage and/or incineration. The bulk of the Carolina plant's wastes (e.g. lab packs) cannot be burned and are shipped off-site to a disposal facility.

3.0 ON-SITE OBSERVATIONS

3.1 IDENTIFICATION OF HAZARDOUS WASTE

Eli Lilly's hazardous waste storage area (HWSA) is surrounded by a 2-foot high cement wall and partially covered by an aluminum roof. At the time of inspection, there were 4 separate stacks of drums.

Approximately fifteen 55-gallon plastic drums were observed in the front section of the HWSA. These drums were from the Carolina plants. Six of these drums were not dated with an accumulation date. Several drums were not marked with manifest numbers or EPA identification numbers (Exhibit 2). At least one drum was completely unmarked. Several drums contained old, inappropriate labels, which indicated the drums previous contents. For example, a drum from Carolina Plant #3, Manifest #07019 containing 1,1,1 - trichoroethane had an additional (old) "denatured alcohol" label. Due to the stacking arrangement, labels, if present, were not available for inspection.

In another section of the HWSA, approximately two hundred and twenty-five 55-gallon metal drums containing used incinerator bricks were stacked 3-high, 5-across, and 15-long (Exhibit 2). Most of these drums were labeled hazardous although, due to the stacking arrangement, it was impossible to view all of the labels. Many of these drums were not marked with Manifest numbers, EPA identification numbers, or accumulation dates (Exhibit 2).

The third section of the HWSA contained approximately eighteen 55-gallon metal drums containing sludge from former hazardous waste storage tanks. These drums reportedly contained solvent waste sludge, although the labels merely indicated "solid" hazardous waste. These drums were dated 10-11-86 and were scheduled to be transported out of state according to Eli Lilly's on-site personnel.

Approximately sixty 55-gallon metal drums containing activated carbon were observed in the final section the HWSA. Three of these drums were open. These were not marked hazardous and were reportedly awaiting permission to be disposed of in a landfill.

Two discarded tanks were observed in the HWSA awaiting closure approval from the EQB. These tanks are included in the closure plan.

3.2 EXAMINATION OF PAPERWORK

3.2.1 THE MANIFEST RECORD

Several of Eli Lilly's manifest documents from 1986 and 1987 are missing signed TSD copies.

Eli Lilly's Carolina Plant #2 was misclassifying F-solvent wastes on the manifests. Some waste solvent shipments from the Carolina plants were listed as both F001 and F002 without any additional description (Exhibit 3). Discrepancies on these and other manifests were not noted in the space provided on Form 8700-22 (Exhibit 4). Waste solvent codes F001 and F003 are used interchangeably for methanol/acetone mixture shipments (Exhibit 5) for no apparent reason.

Eli Lilly's record shows that manifest shipment 87020 came to Eli Lilly, Mayaguez on 9-3-87 from Carolina Plant #3, and was returned to the same plant on 9-4-87 (Exhibit 6). It appears that Carolina Plant #3 was using

Eli Lilly Mayaguez for temporarily handling waste that had been stored beyond Carolina's 90-day storage limit, and that Eli Lilly was then returning the shipment to the Carolina plant in order to initiate another accumulation period. Eli Lilly explained that shipment #87020 was mistakenly sent to them on 9/3/87, so they returned it the next day. Eli Lilly therefore transported hazardous waste without obtaining a transporter license.

3.2.2 INSPECTION LOG BOOK

At the time of inspection, Eli Lilly was unable to provide a weekly inspection log book for the HWSA, the incinerator, or the tank storage area for the years 1985 and 1986.

3.2.3 WASTE ANALYSIS

At the time of inspection, Eli Lilly was unable to provide waste analyses from Eli Lilly's Carolina Plants #1 and #3.

4.0 CONCLUSIONS

Eli Lilly does not generate, treat, store, or dispose of California-listed wastes and is therefore exempt from the pertaining regulations.

Eli Lilly is cited for the following violations of federal regulations 40 CFR 262, 263, 265, and 268.

1) 40 CFR 262.32 - Marking

   Failure to appropriately mark containers holding hazardous waste (i.e., old labels remain; drums were completely missing labels; tanks in the HWSA were unlabeled)

2) 40 CFR 262.34 - Accumulation Time

   (a)(2) Failure to mark each container of hazardous waste (e.g. containers holding used incinerator bricks, see Exhibit 2), with the dates upon which accumulation began.

3) 40 CFR 263.11 - Standards Applicable to Transporters of Hazardous Waste

   Failure to comply with <u>all</u> standards applicable to transporters of hazardous waste and to apply for a transporter EPA ID number.

4) 40 CFR 265.13 - General Waste Analysis

   (a)(1) Failure of the facility to obtain a chemical and physical analysis of a representative sample of the waste treated, stored, or disposed of at the facility.

5) 40 CFR 265.15 - General Inspection Requirement

(d) Failure to keep record of inspections for at least three years from the date of the inspections.

6) 40 CFR 265.35 - Required Aisle Space

Failure to maintain aisle space at the HWSA to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment.

7) 40 CFR 265.71 - Use of the Manifest System

(a)(2) Failure to note discrepancy in waste quantities on manifest 87004, dated 7-15-87 (see Attachment 3, Exhibit 3), and on manifests submitted to Eli Lilly by the Carolina plants.

(b)(5) Failure to retain a TSD copy of each manifest as a record for at least three years from the date the waste was accepted by the initial transporter.

ATTACHMENT 1

RCRA INSPECTION FORM

Report Prepared for:

Generator ☐

Transporter ☐

HWM (TSD) FACILITY ☑

Copy of Report Sent to the Facility ____

FACILITY INFORMATION

NAME: ELI LILLY INDUSTRIES, INC.

LOCAL ADDRESS: _____

_____ Zip Code

POSTAL ADDRESS: P.O. Box 1748

MAYAGUEZ, PR Zip Code 00708

E.P.A. ID #: PRD091024786

DATE OF INSPECTION: OCTOBER 21, 1987

Participating Personnel

E.Q.B. or E.P.A. Personnel: Scott Graber, CDM FPC

John Mihalich, CDM FPC

Facility Personnel: Gabriel Garcia

Report Prepared by: (Name) John Mihalich, CDM FPC

Agency: EPA

Telephone Number: 212-393-9634

Approved for the Director by: _____

Facility Name: Eli Lilly

Address: _____

_____

Time In: _____

Time Out: _____ EPA ID: PRD091024786

Date of Inspection: 10-21-87

Photos Taken ☑ Yes ☐ No

If yes, how many? 9 (nine)

Sample Taken ☐ Yes ☑ No No. of Samples _____

Manifests Reviewed ☑ Yes ☐ No

Number of manifests in compliance ~100

Number of manifests not in compliance ~18

List manifest document numbers of those manifests not in compliance.

87036
87035
87034
87032
87031
87030
87029
87028
87027
87026
00110
00102
87004
00004
00002
86006
86007
87001

SUMMARY OF FINDINGS

FACILITY DESCRIPTION AND OPERATIONS

Manufacture of 2 antibiotics, 2 analgesics, and 1 hypoglycemic
4 reaction buildings which are product specific
WTP on-site
Incinerator onsite
(see notes for additional information)

Describe the activities that result in the generation of hazardous waste.

Solvents used as chemical carriers; off-spec material

Identify the hazardous waste located on site, and estimate the approximate quantity of each. (Identify Waste Codes)

toluene, acetone, methyl & ethyl alcohol, hexane, ethyl acetate, HCl, caustics, acetic acid, di-ethylene, tri-ethylene, acetonitrate, methylene cyanide (see notes)

Is there reason to believe that the facility has hazardous waste on-site?

a. If yes, what leads you to believe it is hazardous waste? Check appropriate boxes.

☑ Company admits that its waste is hazardous during the inspection.

☑ Company admitted the waste is hazardous in its RCRA notification and/or Part A Permit Application.

☐ The waste material is listed in the regulations as a hazardous waste from a nonspecific source (§261.31).

☑ The waste material is listed in the regulations as a hazardous waste from a specific source (§261.32).

☐ The material or product is listed in the regulations as a discarded commercial chemical product (§261.33).

☐ Testing has shown characteristics of ignitability, corrosivity, reactivity or extraction procedure toxicity, or has revealed hazardous constituents (please attach analysis report).

☐ Company is unsure but there is reason to believe that waste materials are hazardous. (Explain)

GENERATOR INSPECTION CHECKLIST

40 CFR 262 Subpart A - General

		YES	NO	N/A
262.11	**Hazardous waste determination**			
	(a) Did the generator test its waste to determine whether it is hazardous?	✓	—	—
	Is the waste hazardous?	✓	—	—
	Is the generator determining that its waste exhibitis a hazardous waste characteristic(s) based on its knowledge of the material(s) or processes used? BOTH	✓	—	—

40 CFR Subpart B - The Manifest

262.20	Has hazardous waste been shipped off site since November 19, 1980?	✓	—	—
	If yes, how many shipments, off site, have been made and describe the approximate size of an average shipment made on a monthly basis. If facility is a small quantity generator, please explain.			

4 shipments/month
7500 gallons/shipment

Does the generator have an EPA ID #?	✓	—	—
Does each manifest have the following information? Please circle the elements missing and obtain a copy of the incomplete manifests. (List those manifests that are deficient)	—	✓	—
The generator's name, address and phone number?	✓	—	—
The generator's EPA ID number?	✓	—	—

	YES	NO	N/A
The transporter(s) name, address, and phone number?	✓	—	—
The transporter(s) EPA ID number?	✓	—	—
The name, address and phone number of the designated TSD facility?	✓	—	—
The TSDF's EPA ID number?	✓	—	—
The name, type and quantity of hazardous waste being shipped, including such particulars as may be required regarding same?	✓	—	—
Special handling instructions and any other information required on the form to be shipped by the generator? LAND BAN	—	✓	—
Before allowing the manifested waste to leave the generator's property, did the generator:			
Sign the manifest certification by hand? / missing	—	✓	—
Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest?	✓	—	—
Retain one copy and forward one copy to the state of origin and one copy to the state of destination? generator copies missing	—	✓	—
Give remaining copies of the manifest form to the transporter?	✓	—	—
Has the generator maintained facility records for three (3) years (Manifest)s, exception report(s) and waste analysis) missing 1985	—	✓	—

	YES	NO	N/A
Has the generator received signed copies of portion B (from the TSD facility) of all manifests for waste shipped off site more than 35 days ago?	—	✓	—
If not:			
1. Did the generator contact the hauler and/or the owner or operator of the TSDF and the EQB to inform the EQB of the situation, and	—	✓	—
2. Have exception reports been submitted to the EQB covering any of these shipments made more than 45 days ago?	—	✓	—
Before transporting or offering hazardous waste for transportation off site, does the generator?	—	—	—
Conspicuously lable appropriate manifest numbers on all hazardous waste containers that are intended for shipment?	—	✓	—
Insure that all containers used to transport hazardous waste off site are in conformance with applicable DOT regulations (i.e., 49 CFR 171 - 49 CFR 179)?	✓	—	—

Accumulation Time

How is waste accumulated on site?

- ☑ Containers
- ☑ Tanks (complete HWMF checklist)
  - ☑ Aboveground ☐ Below ground
- ☐ Surface impoundments (complete HWMF checklist)
- ☐ Piles (complete HWMF checklist)

	YES	NO	N/A
Is each container clearly dated with each period of accumulation so as to be visible for inspection?	—	✓	—
Is waste accumulated for more than 90 days?	✓	—	—
If yes, complete HWMF checklist.			

STOP HERE IF THE HAZARDOUS WASTE MANAGEMENT FACILITY (TSD) CHECKLIST IS FILLED OUT.

HAZARDOUS WASTE FACILITY STANDARDS

40 CFR Part 265 Subpart B - General Facility Standards

		YES	NO	N/A
265.13	**Waste Analysis**			
	Is there a detailed chemical and physical analysis of a representative sample of the waste(s) or each waste? (At a minimum, this analysis must contain all the information necessary for proper treatment, storage or disposal of the waste).	✓	—	—
	Does the character of the waste handled at the facility change from day to day, week to week, etc., thus requiring frequent testing?	—	✓	—
	Check only one:			
	Waste characteristics vary —			
	All waste(s) are basically the same —			
	Company treats all waste(s) as hazardous —			
	Is there a written waste analysis plan at the facility?	✓	—	—
	Does it contain:			
	Parameters for which each hazardous waste stream will be analyzed and the rational for the selection of these parameters?	✓	—	—
	The test methods which will be used to test for these parameters?	✓	—	—
	The sampling method which will be used to obtain a representative sample of the waste to be anlayzed?	✓	—	—

	YES	NO	N/A
The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date? every 2 wks.	✓	—	—
For off-site facilities, the waste analysis that hazardous waste generators have agreed to supply?	—	✓	—
Procedures which will be used to identify changes in waste stream characteristics? in Part B app.	✓	—	—
Did the owner or operator submit the waste analysis plan to the department?	✓	—	—

If yes, when was the plan submitted?
in Amended Part B app

Does hazardous waste come to this facility from an outside source (e.g., another generator)?	✓	—	—

If yes, list the name(s) of generators.
Eli Lilly Carolina Plants PO1
PO2
PO3

If waste comes from an outside source, are there procedures in the waste analysis plan to insure that waste received conforms to the accompanying manifest?	✓	—	—

Does the plan describe:

The procedures which will be used to determine the identity of each shipment of waste managed at the facility?	✓	—	—
The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling?	✓	—	—

		YES	NO	N/A
265.14	**Security**			
	Does the facility have:			
	A 24 hour surveillance system which continuously monitors and controls entry onto the active portion of the facility?	✓	—	—
	An artificial or natural barrier, which completely surrounds the active portion of the facility; and a means to control entry, at all times, through the gates or other entrances to the active portion of the facility?	✓	—	—
	Are there "Danger-Unauthorized Personnel Keep Out" signs posted at each entrance to the facility?	✓	—	—
	If no, explain what measures are taken for security.			

265.15 General Inspection Requirements

	YES	NO	N/A
Does the owner or operator inspect the facility for malfunctions and deterioration, operator errors and discharges which may be causing, or may lead to:			
Discharge of hazardous waste constituents to the environment?	✓	—	—
A threat to human health?	✓	—	—
Has the owner or operator developed, and does the owner or operator follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are utilized for the prevention, detection or response to the environmental or human health?	✓	—	—
Is the written inspection schedule kept at the facility?	✓	—	—
Does the schedule identify the types of problems to be looked for during the inspection?	✓	—	—
Does the schedule include the frequency of inspection, based upon the rate of possible deterioration of the equipment and the probability of an environmental, or human health incident if the deterioration or malfunctions or any operator error goes undetected between inspections?	✓	—	—
Is there evidence that problems reported in the inspection log have been remedied?	✓	—	—
Does the owner/operator record inspections in a log?	✓	—	—
Are these records kept for at least three (3) years from the date of inspection? None for '85, '86; facility indicated it was unnecessary for interim status	—	✓	—

		YES	NO	N/A
	Does the records include the date, and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial action?	—	✓	—
265.16	Personnel training			
	Have facility personnel successfully completed a program of classroom instruction or on-the-job training within six (6) months of having been employed?	✓	—	—
	Is the program directed by a person trained in hazardous waste management procedures and does it include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed?	✓	—	—
	If yes, have facility personnel taken part in an annual review of training?	✓	—	—
	Is there written documentation of the following:			
	Job title for each position at the facility related to hazardous waste managment, and the name of the employee filling each job?	✓	—	—
	A written job description for each position related to hazardous waste management?	✓	—	—
	A written description of the type and amount of both introductory and continuing training given to personnel in jobs related to hazardous waste management?	✓	—	—
	Documentation of actual training or experience received by personnel?	✓	—	—

	YES	NO	N/A
Are training records kept on all current employees until closure of the facility and training records kept on former employees for 3 years from their last date of employment?	✓	—	—
Preparedness and prevention			
Does the facility comply with preparedness and prevention requirements including maintaining:			
An internal communications or alarm system?	✓	—	—
A telephone or other device to summon emergency assistance from local authorities?	✓	—	—
Portable fire equipment, spill control equipment, and decontamination equipment?	✓	—	—
Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems?	✓	—	—
Is equipment tested and maintained?	✓	—	—
Is there immediate access to communications or alarm systems during handling of hazardous waste?	✓	—	—
Adequate aisle space to allow unobstructed movement of personnel fire protection equipment, spill control equipment and decontamination equipment?	✓	—	—
If no, please explain.			

	YES	NO	N/A
In your opinion, do the types of waste on site require all of the above procedures, or are some not required?	✓		
Explain. ?			
Has the facility made the following arrangements, as appropriate for the type of waste handled on site?			
Familiarize police, fire departments and emergency response teams with the layout of the facility and hazardous waste handled?	✓		
Where more than one police and fire department might respond to an emergency, is there an agreement designating primary emergency authority to a specific police or fire department, and agreements with any others to provide support to the primary emergency authority?	✓		
Agreements with emergency response contractors, and equipment suppliers?	✓		
Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or discharges at the facility?	✓		

UNDER REVISION BY EPA; 3-15-87

		YES	NO	N/A
265.50	**Contingency plan and emergency procedures**			
	Does the facility have a written contingency plan for emergency procedures designed to deal with fires, explosions, hazards to human health or environment, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water?	✓	—	—
	Are provisions of the plan carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment?	✓	—	—
	Does the contingency plan describe the actions facility personnel shall take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility?	✓	—	—
	Did the owner or operator prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112 or Part 1510?	✓	—	—
	If yes, did the owner or operator amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this section? 3-15-87	✓	—	—
dated 6-4-82	Does the plan describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services? No addresses in 1987 plan	✓	—	—

	YES	NO	N/A
Does the plan list names, addresses, and phone number (office and home) of all persons qualified to act as emergency coordinator and is this list kept up-to-date? Where more than one person is listed, one shall be named as primary emergency coordinator and others shall assume responsibility as alternates.	✓	—	—
Does the plan include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required? Is the list kept up-to-date? In addition, does the plan include the location and a physical description of each item on the list, and a brief outline of its capabilities?	✓	—	—
Does the plan include an evacuation procedure for facility personnel where there is a possibility that evacuation could be necessary? Does this plan describe signal(s) to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires)?	✓	—	—
Is a copy of the contingency plan and all revisions to the plan:			
1. Maintained at the facility; and	✓	—	—
2. Has the contingency plan been submitted to local authorities (police, fire departments, emergency response teams)? Dated 6-4-82	✓	—	—

		YES	NO	N/A
265.112	Closure plan			
	Does the facility have a written closure plan?	✓	—	—
	Does the owner/operator keep a written copy of the closure plan and all revisins to the plan at the facility?	✓	—	—
	If yes, does the plan include:			
	A description of how and when the facility will be partially closed (if applicable) and ultimately closed?	✓	—	—
	The maximum extent of the operation which will be unclosed during the life of the facility?	✓	—	—
	An estimate of the maximum inventory of wastes in storage or in treatment at any given time during the life of the facility?	✓	—	—
	A description of the steps needed to decontaminate facility equipment during closure?	✓	—	—
	A schedule for final closure including the anticipated date when the wastes will no longer be received, the date when completion of final closure is anticipated, and intervening milestone dates which will allow tracking of the progress of closure?	✓	—	—
265.118	Post Closure Plan			
	Does the facility have a written post-closure plan kept at the facility?	—	—	✓

	YES	NO	N/A
If yes, does the plan:			
Identify the activities which will be carried on after closure and the frequency of these activities?	—	—	✓
Include a description of the planned groundwater monitoring activities and frequencies at which they will be performed?	—	—	✓
Include a description of the planned maintenance activities, and frequency at which they will be performed, to insure the following:			
The integrity of the cap and final cover or other containment structures where applicable?	—	—	✓
Describe the function of the facility monitoring equipment?	—	—	✓
Include the name, address and phone number of a person or office to contact about the disposal facility during the post-closure period?	—	—	✓
Does the owner/operator have a written estimate of the cost of post-closure for the facility?	—	—	✓
If yes, what is it?			

Please circle all appropriate activities and answer questions on indicated pages for all activities circled.

Storage	Treatments	Disposal
Container - pg. 5	Tank - pg. 30	Landfill - pg. 39
Tank, above ground - pg. 6	Surface Impoundments - pg. 35	Surface Impoundments - pg. 35
Tank, below ground - pg. 6	Incineration - pg. 42	Other_____
Surface Impoundments - pg. 35	Thermal Treatment - pg. 45	
Waste Piles - pg. 37	Chemical, Physical and Biological Treatment - pg. 45	
Other_____	Other_____	

	YES	NO	N/A

40 CFR 265 Subpart 1

Containers

What type of containers are used for storage? Describe the size, type, quantity and nature of wastes (e.g., 12 fifty-five gallon drums of waste acetone). 55-gallon metal
55-gallon plastic

Is there a containment system for spills, leaks and precipitation? ✓

If yes, describe the containment system.
2 ft high cement wall
partial aluminum roof
(see notes)

Do the containers appear to be of sturdy leakproof construction of adequate wall thickness, weld, hinge and seam strength, and of sufficient material strength to withstand side and bottom shock, while filled, without impairment of the container's ability to contain hazardous waste? ✓

If no, explain.

	YES	NO	N/A
Are the lids, caps, hinges or other closure devices of sufficient strength that when closed, they will withstand dropping, overturning or other shock without impairment of the container's ability to contain hazardous waste?	✓	—	—

If no, explain.

with exception of activated carbon drums

Do the containers appear to be in good condition, not in danger of leaking?	✓	—	—

If not, please describe the type, condition and number of leaking or corroded containers. Be detailed and specific.

Are all containers securely closed, except those in use, so that there is no escape of hazardous waste or its vapors?	✓	—	—

If no, explain.

Do containers appear to be properly opened, handled or stored in a manner which will minimize the risk of the container rupturing or leaking?	—	✓	—

If no, explain. aisle space

	YES	NO	N/A
Are containerized hazardous wastes segregated in storage by waste type?	✓	—	—
Are containerzied hazardous wastes arranged so that their identification label is visible?	—	✓	—
Are hazardous wastes stored in containers made of compatible materials?	✓	—	—
Does the owner/operator inspect the container storage area at least weekly, looking for leaks and for deterioration caused by corrosion or other factors?	✓	—	—
Are containers holding ignitable and reactive waste located at least 50 feet (15 meters) away from the facility's property line?	✓	—	—
Are incompatible wastes, or incompatible wastes and materials placed in the same container?	—	✓	—
If yes, explain.			
Are hazardous wastes place in unwashed containers that previously held incompatible wastes?	—	✓	—
If yes, explain.			

	YES	NO	N/A
Are containers holding hazardous waste that are incompatible with any waste or other materials stored nearby in other containers, open tanks, or surface impoundments separated from other materials or protected from them by means of a dike, berm, wall or other device?	✓	—	—
Are ignitable, reactive or incompatible wastes protected from sources of ignition or reaction?	✓	—	—
If no, explain.			
Does the owner/operator confine smoking and open flames to specially designated locations when ignitable or reactive wastes are being handled?	✓	—	—
If no, explain.			
Does the owner/operator conspicuously place "No Smoking" signs whenever there is a hazard from ignitable or reactive waste?	✓	—	—
If the treatment, storage or disposal of ignitable or reactive waste, and the mixture of incompatible wastes and materials, conducted so that it does not:			
Generate extreme heat or pressure, fire or explosion, or violent reaction?	✓	—	—

	YES	NO	N/A
Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health?	✓	—	—
Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk or fire or explosion?	✓	—	—
Damage the structural integrity of the device or facility containing the waste?	✓	—	—
Threaten human health or the environment?	✓	—	—

40 CFR 265 Subpart J

Tanks

What are the approximate number and size of tanks containing hazardous wastes?

5 tanks
12,000 gallons each

Identify the waste treated/stored in each tank.

See notes

	YES	NO	N/A
General Operating Requirements			
Are hazardous wastes or treatment reagents placed in the tank that could cause the tank or its inner liner to rupture, leak or corrode?	—	✓	—
If yes, please explain.			
Are there leaking tanks?	—	✓	—
Are all hazardous wastes or treatment reagents being placed in tanks compatible with the tank material so that there is no danger or ruptures, corrosion, leaks or other failures?	✓	—	—
Do uncovered tanks have at least 2 feet of freeboard or an adequate containment structure?	—	—	✓
If waste is continuously fed into a tank, is the tank equipped with a means to stop the inflow from the tank, e.g., bypass system to a standby tank?	✓	—	—
Inspections			
Is the tank(s) inspected for:			
1. Discharge control equipment (each operating day)	✓	—	—
2. Monitoring equipment (each operating day)	✓	—	—
3. Level of waste in tank (each operating day)	✓	—	—
4. Construction of materials of the tank (weekly)	✓	—	—
5. Are the tanks and surrounding areas (e.g., dike) inspected weekly for leaks, corrosion or other failures (weekly)?	✓	—	—

	YES	NO	N/A
Are there underground tanks used to store hazardous wastes?	—	✓	—
If yes, how many and can they be entered for inspection?	—	—	✓
Has the underground tank been in use on or before November 19, 1980? Specify date.	—	—	✓
If no, when was the tank placed in use?			
Are ignitable or reactive wastes stored in a manner which protects them from a source of ignition or reaction?	—	—	✓
If no, please explain.			
Does it appear that incomptabile wastes are being stored separate from each other?	—	—	✓

		YES	NO	N/A
	40 CFR 265.90 Subpart F			
265.90	Groundwater monitoring			
	(Applies only to: surface impoundments, landfills, land disposal facilities)			
	Does the owner/operator have a groundwater monitoring plan capable of determining the facility's impact on the quality of groundwater?	—	—	✓
	If no, please explain.			
	How many monitoring wells has the facility installed?			
	What is the depth to groundwater?			
	How many deep monitoring wells are on-site? (Indicate depth of monitoring wells)			
	How many shallow monitoring wells are on-site? (Indicate depth of monitoring wells)			

	YES	NO	N/A
Is the groundwater monitoring system capable of yielding groundwater samples for analysis? If no, please explain.	—	—	✓
Are monitoring wells installed hydraulically upgradient? If yes, specify how many and the depth of each.	—	—	✓
How many monitoring wells are installed hydraulically down gradient? If yes, specify how many and the depth of each.	—	—	✓
Does the owner/operator have a groundwater sampling and analysis plan? If no, please explain.	—	—	✓

	YES	NO	N/A
Does the plan include procedures and techniques for:			
1. Sample collection	—	—	✓
2. Sample preservation and shipment	—	—	✓
3. Analytical procedures	—	—	✓
4. Chain of custody	—	—	✓

40 CFR Subpart K

265.220 Surface Impoundments

Describe the design and operating features of the surface impoundment to prevent groundwater contamination (e.g., liner leachate collection system). concrete-based

Give the approximate size of surface impoundments (gallons or cubic feet). Please specify the types of waste stored and treated.

See notes
5 impoundments: oxidation, equalization, dilution, neutralization.

Is there at least two feet of freeboard in the impoundment?	✓	—	—
Do all earthen dikes have a protective cover to preserve their structural integrity?	✓	—	—

If yes, please specify the type of covering.
cement-walled

	YES	NO	N/A
Does the owner/operator have a detailed chemical and physical analysis of a representative sample of the waste in the impoundment?	✓	—	—
Does the owner/operator place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility?	✓	—	—
Does the owner or operator inspect:			
The freeboard level at least once each operating day to insure compliance with 265.222?	✓	—	—
The surface impoundment, including dikes and vegetation surrounding the dike, at least once a week to detect any leaks, deterioration or failures in the impoundment?	✓	—	—
Is ignitable or reactive waste placed in the surface impoundment?	—	✓	—
If yes, is the waste treated, rendered, or mixed before or immediately after placement in the impoundment?	—	—	✓
Does the resulting waste, mixture, or dissolution of material no longer meet the definition of ignitable or reactive waste?	—	—	✓
Is the waste treated, rendered or mixed so that it does not:			
Generate extreme heat or pressure, fire or explosion, or violent reaction?	✓	—	—
Produce uncontrolled toxic mists, fumes, dusts, of gases in sufficient quantities to threaten human health?	✓	—	—
Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion?	✓	—	—

	YES	NO	N/A
Damage the structural integrity of the device or facility containing the waste?	✓	—	—
Threaten human health or the environment?	✓	—	—
Is the surface impoundment used soley for emergencies?	—	✓	—
Are incompatible wastes, or incompatible wastes and materials placed in the same surface impoundment?	—	✓	—
If yes, is the waste managed so that it does not:			
Generate extreme heat or pressure, fire or explosion, or violent reaction?	—	—	✓
Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health?	—	—	✓
Damage the structural integrity of the device or facility containing the waste?	—	—	✓
Threaten human health or the environment?	—	—	✓

40 CFR Subpart L

265.250 **Waste Piles**

How many waste piles are on-site and approximately how large are they? (Please indicate size and height types of wastes in piles.)

Is the waste pile protected from wind erosion?	—	—	✓
a) Does it appear to need such protection?	—	—	✓
b) Explain what type of protection does exist.			

		YES	NO	N/A
265.253	**Containment**			
	1. Is leachate run-off from the waste piles a hazardous waste? If no, skip down to 265.256.			
	2. Is the pile placed on an impermeable base?			
	3. Is run-on diverted away from the pile?			
	4. Is the leachate and run-off collected and treated?			
	If no to any of the above questions than:			
	5. Is the pile protected from precipitation and run-on?			
	6. Are waste containing free liquids placed in the pile?			
265.256	1. Are ignitable or reactive wastes placed on the pile? If no, skip to 265.257.			
	2. Is the ignitable or reactive waste added to existing pile resulting in it no longer meeting the definition of ignitable and reactive?			
	If no, please explain.			
	3. Is the waste protected from any materials or condition that may cause it to ignite or react?			
	If no, please explain.			

		YES	NO	N/A
265.257	Does it appear that a pile of incompatible wastes is being stored separate from other wastes or materials, or protected from them by means of a dike, berm, wall or other devices? If no, please explain.	—	—	—

40 CFR 265 Subpart N

265.300

Landfills

Identify the types of waste and size of the landfill.

General Operating Requirements

Is run-on diverted away from all portions of the landfill?	—	—	—
Is run-off from active portions of the landfill collected?	—	—	—
Is waste which is subject to wind dispersal controlled?	—	—	—

Please explain how.

	YES	NO	N/A
Are untreated, ignitable, or reactive wastes placed in the landfill?			
If yes, explain.			
Are incompatible wastes, or incompatible wastes and materials placed in the same hazardous waste landfill cell?			
If yes, explain.			
Are bulk or non-containerized liquid waste or waste containing free liquids placed in a hazardouswaste landfill?			
If yes:			
Does the hazardous waste landfill have a liner which is chemically and physically resistant to the added liquid and a functioning leachate collection and removal system with a capacity sufficient to remove all leachate produced?			
Before disposal, is the liquid waste or waste containing free liquids treated or stabilized, chemically or physically, so that free liquids are no longer present?			
Are containers holding liquid waste or waste containing free liquids placed in a hazardous waste landfill?			
If yes:			
Is the container designed to hold liquids or free liquids for a use other than storage, such as a battery?			

	YES	NO	N/A
Is the container very small, such as an ampule?			
Are empty containers crushed flat, shredded, or similarly reduced in volume before it is buried beneath the surface of a hazardous waste landfill?			
Does the owner or operator use Method 9095 (Paint Filter Liquids Test) to demonstrate the absence or presence of free liquids in either a containerized or a bulk waste?			
Does the owner or operator of a hazardous waste landfill maintain an operating record reqired in 265.73?			
Does the owner/operator maintain a map, the exact location and dimensions, including depth of each cell with respect to permanently surveyed bench marks?			
The contents of each cell and the appropriate location of each hazardous waste type within each cell?			
Are containers holding liquid waste or waste containing free liquids place in the landfill?			
Please describe the types and contents of such containers placed in the landfill.			
Are empty containers placed in the landfill crushed falt, shredded or similarly reduced in volume before they are buried?			

	YES	NO	N/A
Are small containers of hazardous waste in overpacked drums placed in the landfill?	—	—	✓

If yes, please describe precautions taken to prevent the release of the waste.

40 CFR 265 Subpart O

265.340 **Incinerator**

What type of incinerator is at the site (e.g., waterwall incinerator, boiler, fluidized bed, etc.).

boiler

List the types and quantities of hazardous waste incinerated.

solvent waste
salt. waste

Is the residue from the incinerator a hazardous waste?	—	✓	—

What types of air pollution control devices (if any) are installed in the incinerator unit?

Permit No. PFE-50-1084-0773 I-II-III-O

Is energy recovered from the process?	—	—	✓

If yes, describe.

	YES	NO	N/A
What is the destruction and removal efficiency for the organic hazardous waste constituents? Scrubber water is discharged to Anasco River as per NPDES Permit PR0000353			
Does the operating record include additional analysis and to determine types of pollutants which might be emitted including:			
Heating value of the waste?	✓	—	—
Halogen and sulfur content?	✓	—	—
Concentrations of lead and emergency?	✓	—	—
If no to any of the above questions, is there justification and documentation?	—	—	✓
If operating, does it appear the incinerator is operating at steady state for conditions of operation, including temperature and air flow?	✓	—	—
Monitoring and Inspection			
Are existing instruments relating to combustion and emission controls monitored every 15 minutes?	✓	—	—
If no, explain.			

	YES	NO	N/A
Does the incinerator have all the following instruments for measuring: wastefeed, auxiliary fuel feed air flow, incinerator temperature scrubber flow, and scrubber pH? (Circle missing instruments.)	✓	—	—
If no, explain.			
Is the stack plume observed visually at least hourly for opacity and color?	✓	—	—
Are there any signs of leaks, spill and fugitive emission associated with the pumps, valves, conveyors, pipes, etc?	✓	—	—
If yes, describe.			
Are all emergency shutdown controls and system alarms checked to assure proper operation?	✓	—	—
Is there any reason to believe the incinerator is being operated improperly? i.e., steady state condition are not maintained.	✓	—	—
If yes, explain.			

	YES	NO	N/A
Is the incinerator inspected daily?	✓		
Is there open burning of hazardous waste?		✓	

If yes, what is being burned? (Only burning or detonation of explosives is permitted.)

If open burning or detonation of explosives is taking place, approximately what is the distance from the open burning or detonation to the property of others?

40 CFR 265 Subpart P

265.370 **Chemical, Physical and Biological Treatment**

(Other than in tanks, surface impoundments or plant treatment facilities)

Describe the treatment system at this facility and the types of wastes treated.

N/A

	YES	NO	N/A
Does the treatment process system show any signs of ruptures, leaks or corrosion?	___	___	___
If yes, describe.			
Is there a means to stop the inflow of continuously-fed hazardous wastes?	___	___	___
Inspections			
Is the discharge control safety equipment (e.g., waste feed cut-off systems, by-pass systems, drainage systems and pressure relief systems) in good working order?	___	___	___
Are they inspected at least once each operation day?	___	___	___
Does the data gathered from the monitoring equipment (e.g., pressure and temperature gauges) show treatment process is operating according to design?	___	___	___
Is data gathered at least once each operating day?	___	___	___
Are construction materials of the treatment process inspected at least weekly to detect corrosion or leaking of fixtures and seams?	___	___	___
Are the discharge confinement structures (e.g., dikes) immediately surrounding the treatment unit inspected at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation)?	___	___	___

	YES	NO	N/A
Are ignitable or reactive waste fed into the waste treatment system treated or protected from any material or conditions which may cause it to ignite or react?			✓
If yes, explain how.			
Are the incompatible wastes placed in the same treatment process?			✓
If yes, please explain.			

State Requirement: R. 502 A - Hazardous Waste Generation Records

A. Waste generation log is maintained at the facility (including quantity and type of waste) ✓ ___

B. Records of all test conducted to analyze wastes or to quantify them are maintained at the facility ✓ ___

Comments: _____

_____

_____

_____

eas/sec

ATTACHMENT 2

Inspector: CDM FPC
Address: 59 JOHN ST
NY NY 10038
Telephone No: 212-393-9634

RCRA LAND RESTRICTION F-SOLVENT GENERATOR CHECKLIST

I. HANDLER IDENTIFICATION

ELI LILLY INDUSTRIES, INC.
A. Handler Name

B. Street (or other identifier)

Mayaguez
C. City

PR
D. State

00708
E. Zip Code

F. County Name

Manufacture of pharmaceutical products
G. Nature of Business; Identification of Operations

PRD091024786
H. EPA ID #

Gabriel Garcia
I. Handler Contact (Name and Phone Number)

II. GENERATOR COMPLIANCE

A. F-Solvent Identification

1. Does the handler generate the following wastes?

a. F001 ___Yes ✓No
b. F002 ✓Yes ___No
c. F003 ✓Yes ___No

If an F003 wastestream listed solely for ignitability has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? ✓Yes ___No

d. F004 ___Yes ✓No
e. F005 ✓Yes ___No

2. Source of the above: Form 8700-12 ___; Part A ___; Part B ___; other (specify) TSD facility personnel communication

Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A. Note concerns below:

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

B. BDAT Treatability Group - Treatment Standards Identification

Comments

1. Did the generator correctly determine the appropriate treatability group [268.41] of the waste (Wastewaters containing solvents, pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?

Land ban restriction Notification not provided

___Yes ___No

C. Waste Analysis

1. Did the generator determine whether the waste exceeds treatment standards based on [268.7(a)]:

a. Knowledge of wastes ___Yes ___No

b. TCLP ___Yes ___No

c. Other (specify) _____ //

If knowledge, note how this is adequate:

_____

If determined by TCLP, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: _____

Note any problems: _____

d. Were wastes tested using TCLP when a process or wastestream changed?

___Yes ___No

2. Did the F-solvent wastes exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]? //

___Yes ___No
___Some

3. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [268.3] //

___Yes ___No

D. Management

1. Onsite management

a. Were F-solvent wastes managed onsite?

✓Yes ___No

If yes, answer 1(b) and (c); if no, answer 2.

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

b. For wastes that exceed treatment standards, was treatment, storage, and/or disposal conducted?
__Yes __No

Comments

information not available

If yes, TSDF Checklist must be completed.

c. Are test results maintained in the operating record [264.74(b)3/265.73(b)(3)]?
__Yes __No

2. Offsite Management

a. If F-solvent wastes exceed treatment standards, did generator provide treatment facility [268.7(a)(1)]:

(i) EPA waste number? __Yes __No

(ii) Applicable treatment standard? __Yes __No

(iii) Manifest number? __Yes __No

(iv) Waste analysis data, if available?
__Yes __No

Identify offsite treatment facilities _____

b. If F-solvent wastes did not exceed treatment standards, did generator provide the disposal facility [268.7(a)(2)]:

(i) EPA Hazardous waste number? __Yes __No

(ii) Applicable treatment standard? __Yes __No

(iii) Manifest number? __Yes __No

(iv) Waste analysis data, if available?
__Yes __No

(v) Certification that waste meets treatment standards? __Yes __No

Identify land disposal facilities receiving the BDAT certified wastes _____

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

c. If waste is subject to nationvide variance [268.30] (e.g., solvent-vater mixtures less than 1%), case-by-case extension [268.5] or petition [268.6] does generator provide notice to disposer that waste is exempt from land disposal restrictions [268.7(a)(3)]?

N/A

___Yes ___No

E. Storage of F-Solvent Waste

1. Was F-solvent waste stored for greater than 90 days (after variance 180/270 days for SQG) [268.50(a)(1)]?

✓ Yes ___No

If yes, was facility operating as a TSD under interim status or final permit? ✓ Yes ___No

If yes, TSDF Checklist must be completed.

F. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastevater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes?

✓ Yes ___No

If yes, list type of treatment unit and processes

incinerator, WTP

If the residuals from a RCRA-exempt treatment unit are above the treatment standards, the owner/operator is considered a generator of restricted vaste. The inspector should determine vhether the generator requirements, particularly waste identification requirements, have been met for the treatment residuals.

Facility Name: _____
ID Number: _____
Inspector: _____
Date: _____

C. Storage [268.50]

1. a. Were restricted wastes exceeding treatment standards stored? ___Yes ✓No

If no, go to "D."

b. Are all containers clearly marked to identify content and date(s) entering storage?
___Yes ___No

c. Do operating records track the location, quantity and dates that waste exceeding treatment standards entered and were removed from storage?
___Yes ___No

d. Do operating records agree with container labeling?
✓Yes ___No

e. Is waste exceeding treatment standards stored for ~~less~~ greater than 1 year?
___Yes ✓No

If yes, can you show that such accumulation is not necessary to facilitate proper recovery, treatment, or disposal?
___Yes ___No

If yes, state how: N/A

f. Were tanks emptied at least once per year, and do operating records show that volume of waste removed from tanks annually at least equals tank volume?
✓Yes ___No

g. Was/is waste exceeding treatment standards stored for more than one year?
___Yes ✓No

If yes, state the owner/operator's proof that such storage was solely for the purposes of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal: N/A

h. Are F-solvent wastes exceeding treatment standards "stored" in surface impoundments? ___Yes ✓No

D. Treatment in Surface Impoundments [268.4]

1. Were F001-F005 wastes exceeding treatment standards placed in surface impoundments for treatment?
___Yes ✓No

If no, go to E.

Facility Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

— NA

2. Did the facility submit a certification of compliance with minimum technology and ground water monitoring requirements, and the waste analysis plan to the Agency?
___Yes ___No

3. Have the minimum technology requirements been met?
___Yes ___No

   a. If the minimum technology requirements have not been met, has a waiver been granted for that unit(s)?
___Yes ___No

4. Have the Subpart F ground-water monitoring requirements been met?
___Yes ___No

5. Have representative samples of the sludge and supernatant from the surface impoundment been tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan and are the results in the operating record [264.13/265.13] and [264.73/265.73]?
___Yes ___No

6. Did the hazardous waste residue (sludge or liquid) exceed the treatment standards specified in [268.41]?
___Yes ___No

7. Provide the frequency of analyses conducted on treatment residues: _____
_____

8. Does the operating record adequately document the results of waste analyses performed in accordance with [268.41] and [264.73/265.73]
___Yes ___No

9. Have the hazardous waste residues that exceed the treatment standards [268.41] been removed adequately and on an annual basis?
___Yes ___No

   a. If answer is no and supernatant is determined to exceed treatment concentrations, is annual throughput greater than impoundment volume?
___Yes ___No

10. If residues were removed annually, were adequate precautions taken to protect liners and do records indicate that inspections of liner integrity are performed?
___Yes ___No

11. When removed, were solvent wastes managed subsequently in another surface impoundment?
___Yes ___No

Facility Name: _____
ID Number: _____
Inspector: _____
Date: _____

12. When removed, were wastes treated prior to disposal?
___Yes ___No

Comments

a. If yes, are waste residues treated on or offsite?
___Onsite ___Offsite

NA

b. Identify management method _____

E. Treatment

1. Did the facility operate treatment facilities for F-solvent waste (not including surface impoundments)?
___Yes ✓No

If no, go to "F."

2. Describe the treatment processes for F-solvent wastes.

NA

3. Does the facility, in accordance with an acceptable waste analysis plan, verify that the residue extract from all treatment processes for the F-solvent wastes are less than treatment standards [268.7(b)(2)]?
___Yes ___No

4. Describe frequency of testing of treatment residuals.

5. Was dilution used as a substitute for treatment [268.3]?
___Yes ___No

6. Are certifications and results of waste analyses kept in the operating record [264.73(b)(3)/265.73(b)(3)] and [268.7(c)]?
___Yes ___No

7. Are notice with waste number, treatment standard, manifest number, and analytical data (where available) submitted for each shipment of waste or treatment residual that meets the treatment standard stating that waste has been treated to treatment performance standards [268.7(b)]?
___Yes ___No

8. Are certifications submitted for each shipment [268.7(b)(2)(i)]?
___Yes ___No

Facility Name: _____
ID Number: _____
Inspector: _____
Date: _____

F. Land Disposal

Comments

1. Were F-solvent wastes placed in land disposal units (landfills, surface impoundments [for this question, do not include if in "D"] waste piles, wells, land treatment units, salt domes/beds, mines/caves concrete vault or bunker?

___Yes ___No

NA

2. Did facility have the notice and certification from generators/treaters in its operating record [268.7(c); 268.7(a),(b)]?

___Yes ___No

3. Did the facility obtain waste analysis data through testing of the waste to determine that the vastes are in compliance with the applicable treatment standards [268.7(c)]?

___Yes ___No

If yes, at what frequency? _____

4. Were F-solvent vastes exceeding the treatment standards placed in land disposal units excluding national capacity variances [268.30(a)]?

___Yes ___No

If yes, did facility have an approved vaiver based on no migration petition [268.6] or approved case-by-case capacity extension [268.5] or treatment standard variance [268.44]?

___Yes ___No

5. Were F-solvent vastes subject to a national or case-by-case capacity variance/extension disposed?

___Yes ___No

a. If yes, were these vastes disposed of in a facility that has a new, replacement, or laterally expanded landfill or impoundment?

___Yes ___No

If (a) is yes, have the minimum technology requirements been met for all such units at the facility [268.5(h)(2)] and [268.30(b)]?

___Yes ___No

6. Were adequate records of disposal maintained?

___Yes ___No

7. If wastes subject to a natfonvide variance [268.30], case-by-case extensions [268.5], or no migration petitions [268.6] were disposed, does facility have notices [268.7(a)(3)] and records of disposal?

___Yes ___No

8. What is the volume of F-solvent vaste disposed to date by waste? _____

_____

Facility Name: _____
ID Number: _____
Inspector: _____
Date: _____

9. If the facility has a case-by-case extension, can the inspector verify that the facility is making progress as described in progress reports [268.5]?

__Yes __No

Comments

– NA

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

APPENDIX A

SOLVENT IDENTIFICATION CHECKLIST

1. Does the handler generate any of the following F001 constituents (i.e., spent halogenated solvents used in degreasing) as a result of being used in the process either in pure form or commercial grade?

tetrachloroethylene	___Yes	___No
trichloroethylene	___Yes	___No
methylene chloride	___Yes	___No
1,1,1-trichloroethane	___Yes	___No
carbon tetrachloride	___Yes	___No
chlorinated fluorocarbons	___Yes	___No

2. Does the handler generate any of the following F002 constituents (i.e., spent halogenated solvents) as a result of being used in the process either in pure form or commercial grade?

tetrachloroethylene	___Yes	___No
trichloroethylene	✓Yes	___No
methylene chloride	___Yes	___No
1,1,1-trichloroethane	___Yes	___No
chlorobenzene	___Yes	___No
trichlorofluoromethane	___Yes	___No
1,1,2-trichloro-1,2,2-trifluoroethane	___Yes	___No
ortho-dichlorobenzene	___Yes	___No

3. Does the handler generate any of the following F003 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

xylene	___Yes	___No
acetone	✓Yes	___No
ethyl acetate	___Yes	___No
ethyl benzene	___Yes	___No
ethyl ether	___Yes	___No
methyl isobutyl ketone	___Yes	___No
n-butyl alcohol	___Yes	___No
cyclohexanone	___Yes	___No
methanol	___Yes	___No

If the F003 vastestream has been mixed with a solid waste, does the resultant mixture exhibit the ignitability characteristic? ___Yes ___No

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

With respect to the F003 solvent wastes, if, before use, the wastestream is mixed and contains only F003 constituents, it is a listed waste. For example:

33%	acetone
16%	methanol
51%	ethyl ether
100%	

If the wastestream is a mixture containing F003 constituents and a total of 10% or more of one or more of the F001, F002, F004, and F005 listed constituents before use, it is a listed waste.
For example:

50%	xylene	F003
12%	TCE	F001
38%	mineral spirits	
100%		

If in light of the above, the handler appears to be generating F001-f005 hazardous wastes, refer this facility to the enforcement official for follow-up actions verifying the use of solvents at the facility.

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

4. Does the handler generate any of the following F004 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

cresols and cresylic acid	___Yes	___No
nitrobenzene	___Yes	___No

5. Does the handler generate any of the following F005 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

toluene	✓Yes	___No
methyl ethyl ketone	___Yes	___No
carbon disulfide	___Yes	___No
isobutanol	___Yes	___No
pyridine	___Yes	___No

6. Are any of the constituents listed in the questions 1-5 used for their "solvent" properties -- that is to solubilize (dissolve) or mobilize other constituents? The following questions will be helpful in confirming this determination.

(a) Chemical carriers? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

(b) Degreasing/cleaning? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

(c) Diluents? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

(d) Extractants? ___Yes ___No Comments

If the answer is yes, list the constituents.

_____
_____

(e) Fabric scouring? ___Yes ___No

If the answer is yes, list the constituents.

address

_____
_____

(f) Reaction and synthesis media? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

If questions 1-6 led the inspector to believe that the waste may be an F-solvent, answer question 7.

7. Are any of the above constituents spent solvents? A solvent is considered "spent" when it has been used and is no longer used without being regenerated, reclaimed, or otherwise reprocessed. ___Yes ___No

address

8. If the waste is a mixture of constituents as determined in questions 1-7, answer this to determine whether it is a "solvent mixture" covered by the listings.

If the wastestream is mixed and contains more than one of the F001-F005 constituents listed in questions 1-5 (by volume), give the concentration before use of all the constituents in the solvent mixture/blend. For example:

5%	methylene chloride
2%	trichloroethylene
25%	1,1,1-trichloroethane
68%	mineral spirits
100%	

If the wastestream is a mixture containing a total of 10% or more (by volume) of one or more of the F001, F002, F004, or F005 listed constituents before use, it is a listed waste.

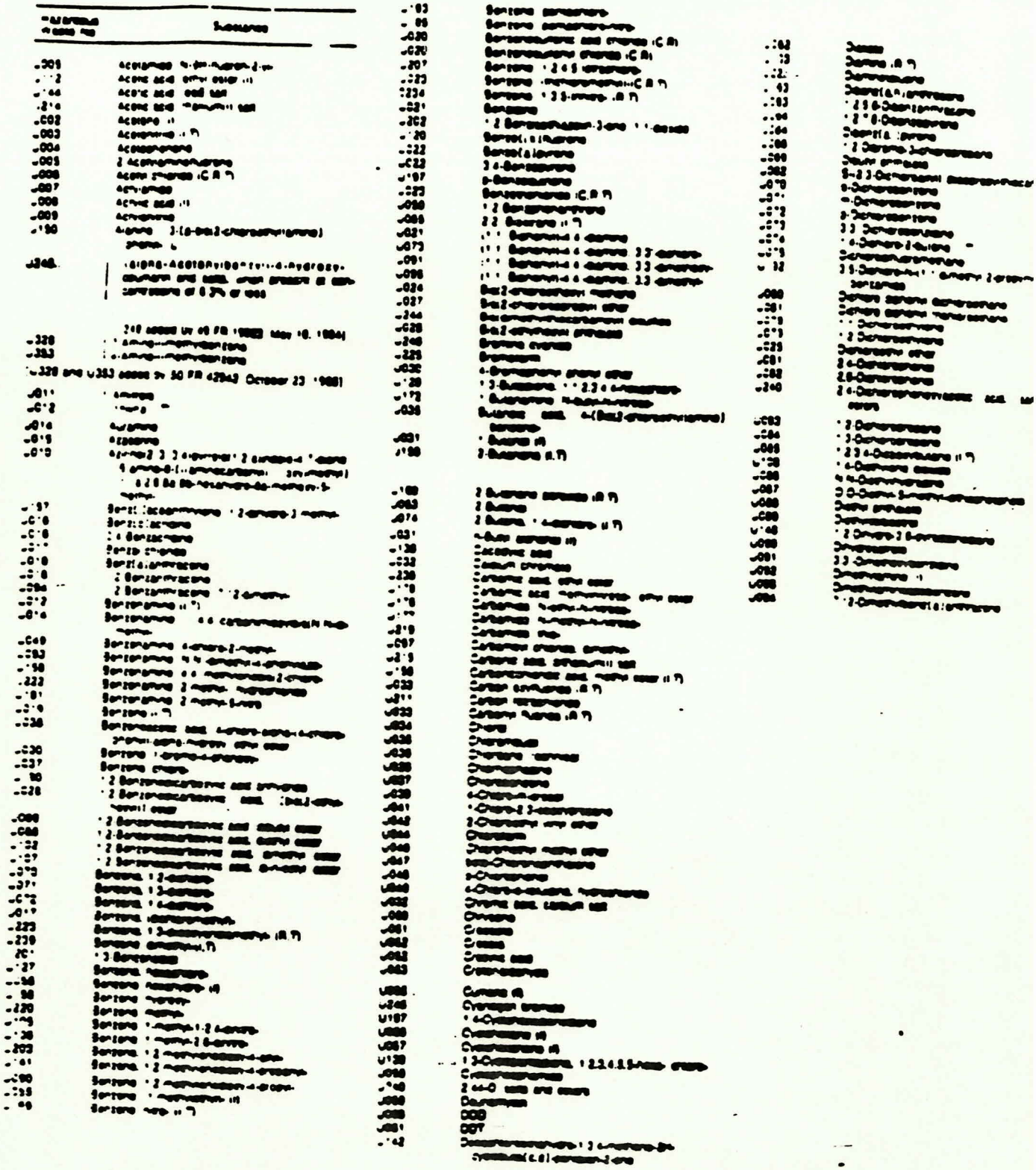
APPENDIX B
TREATMENT STANDARDS FOR F-SOLVENTS

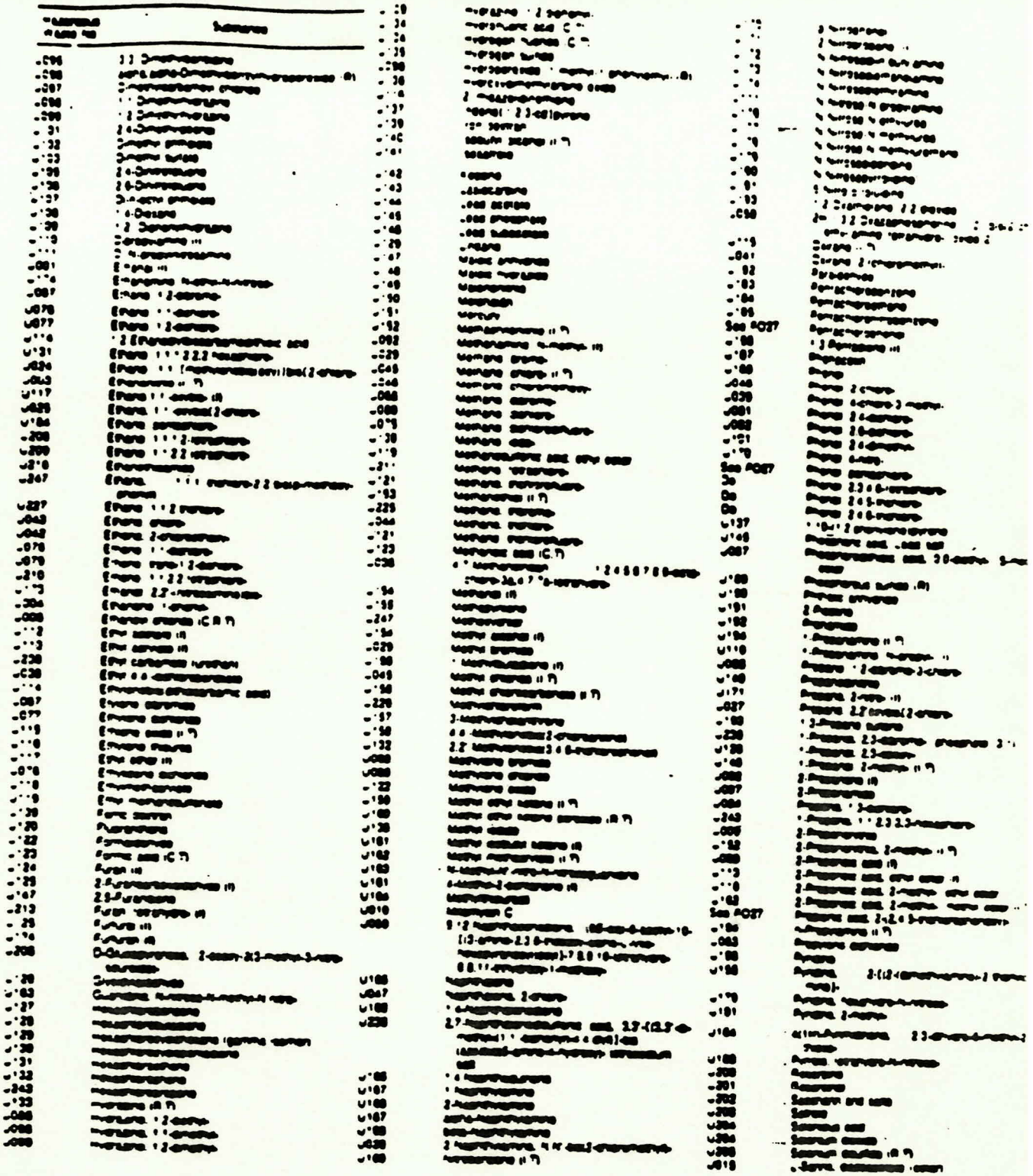
F001-F005 SPENT SOLVENTS	CONCENTRATION (IN MG/L) WASTEWATERS	OTHER WASTES
Acetone	0.05	0.59
N-butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	.05	.96
Chlorobenzene	.15	.05
Cresols (and cresylic acid)	2.82	.75
Cyclohexanone	.125	.75
1,2-dichlorobenzene	.65	.125
Ethyl acetate	.05	.75
Ethyl benzene	.05	.053
Ethyl ether	.05	.75
Isobutanol	5.0	5.0
Methanol	.25	.75
Methylene chloride	.20	.96
Methylene chloride (from the pharmaceutical industry)	12.7	.96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
Nitrobenzene	0.66	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,2,2-Trichloro 1,2,2-trifluoroethane	1.05	0.96
Trichloroethylene	0.062	0.091
Trichlorofluoromethane	0.05	0.96
Xylene	0.05	0.15

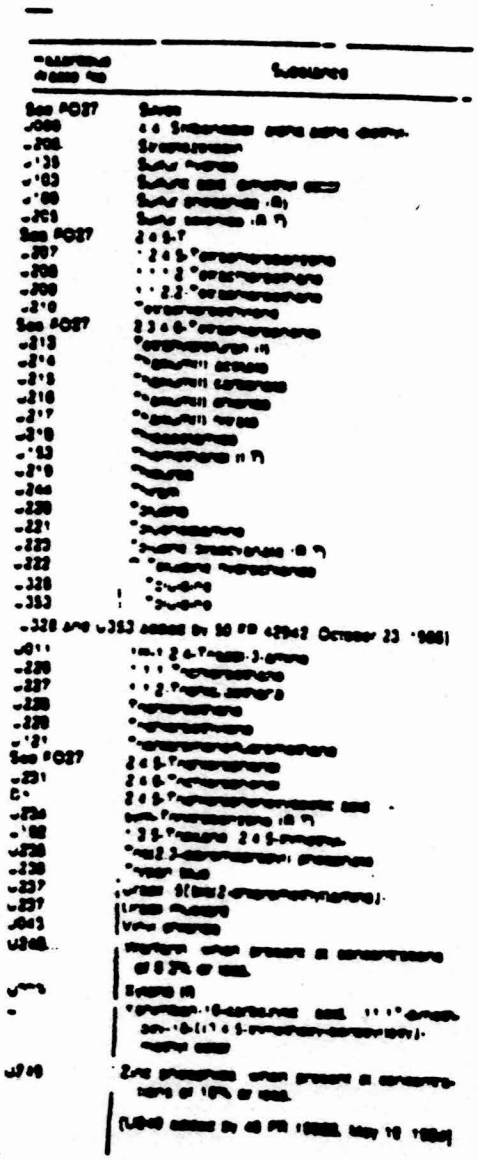
APPENDIX C

include legible copy

LIST OF U WASTES (40CFR 261.33(f)







ATTACHMENT 3

EXHIBIT 1

LABORATORY TEST REPORT

ELI LILLY INDUSTRIES INC
PO BOX 1748
MAYAGUEZ PR 00708
ATTN ENG GABRIEL GARCIA

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Date: APRIL 7,1987
Page 1 of 1

EQ LAB	CLIENT
W.O.#: 111-02-13 D.S.#: 11560 Date Sample Collected/Received: Feb.5/87	Facility: Mayaguez P.O.#: Date Sample Collected: Feb.5/87

Sample #:	Source:	Description:
21703	Tank #13 (Tanque Primario)	Hot Waste

SAMPLE #	PARAMETERS	RESULTS	UNIT	REMARKS
21703	Specific Gravity	0.900	--	
	Fixed Solids (Ash)	0.10	%	
	BTU	15,416	BTU/lb	
	Total Organic Halogen	< 0.1	%	
	Acetonitrile*	1,700	mg/L	
	Water Content, K.F. *	1.10	%	
	Viscosity at 100°C *	2.3	cSt	

Analysis performed at Gascoyne Laboratories Inc.

ISMAEL MARTINEZ JIMENEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 1486
A 063349

Reported by: ISMAEL MARTINEZ
Title: LABORATORY MANAGER

RECEIVED

Released by: JOSE G. VILA
Title: GENERAL MANAGER

LABORATORY TEST REPORT

• ELI LILLY INDUSTRIES INC
PO BOX 1748
• MAYAGUEZ PR 00708
ATTN ENG GABRIEL GARCIA
•

eqlab
ENVIRONMENTAL QUALITY LABORATORIES, INC.

Date: APRIL 7,1987
Page 1 of 1

EQ LAB	CLIENT
W.O.#: 111-02-13 D.S.#: 11559 Date Sample Collected/Received: Feb.5/87	Facility: Mayaguez P.O.#: Date Sample Collected: Feb.5/87

Sample #:	Source:	Description:
21704	Tank #7 (Tanque Secundario)	Cold Waste

SAMPLE #	PARAMETERS	RESULTS	UNIT	REMARKS
21704	Specific Gravity	0.984	--	
	Fixed Solids (Ash)	0.05	%	
	BTU	758	BTU/lb	
	Total Organic Halogen	0.1	%	
	Acetonitrile*	980	mg/L	
	Water Content, K.F.*	86.6	%	
	Viscosity at 100°C *	2.0	cSt	

*Analysis performed at Gascoyne Laboratories Inc.

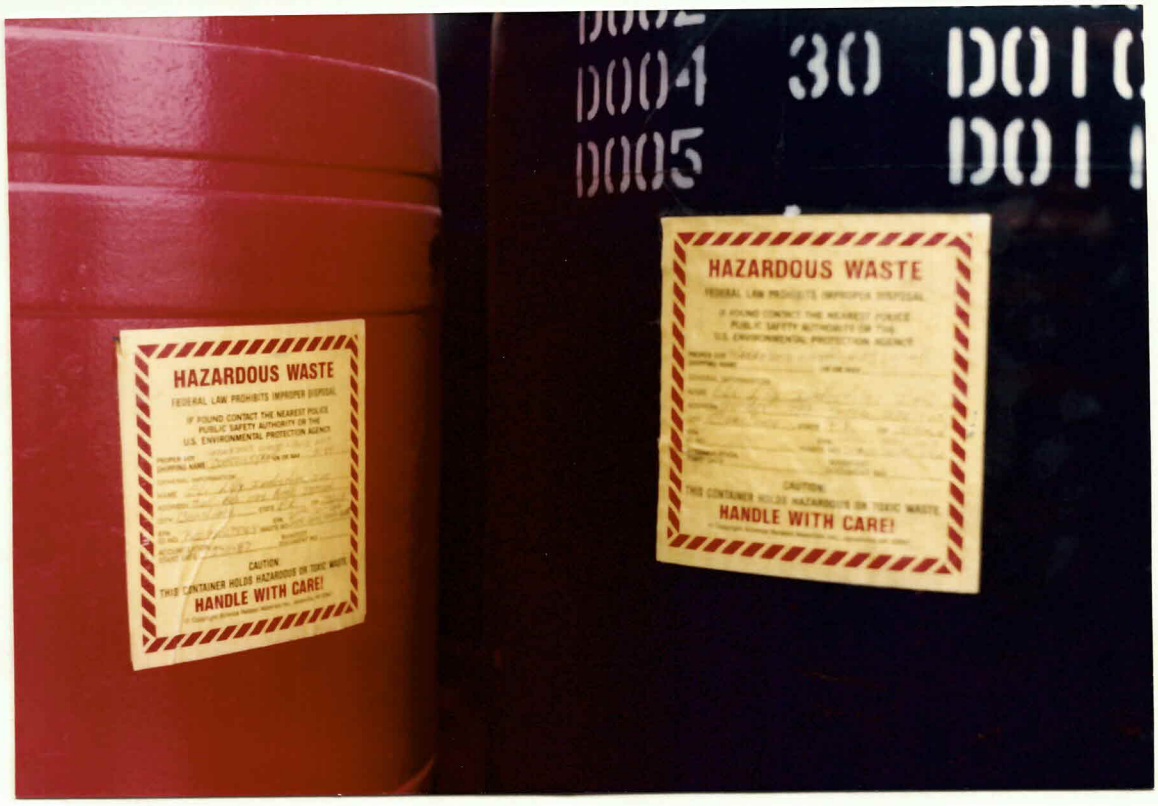
ISMAEL MARTINEZ JIMENEZ
Químico Licenciado
Estado Libre Asociado de Puerto Rico
LICENCIA NUM. 1486

Reported by: ISMAEL MARTINEZ
Title: LABORATORY MANAGER

Released by: JOSE G. VILA
Title: GENERAL MANAGER

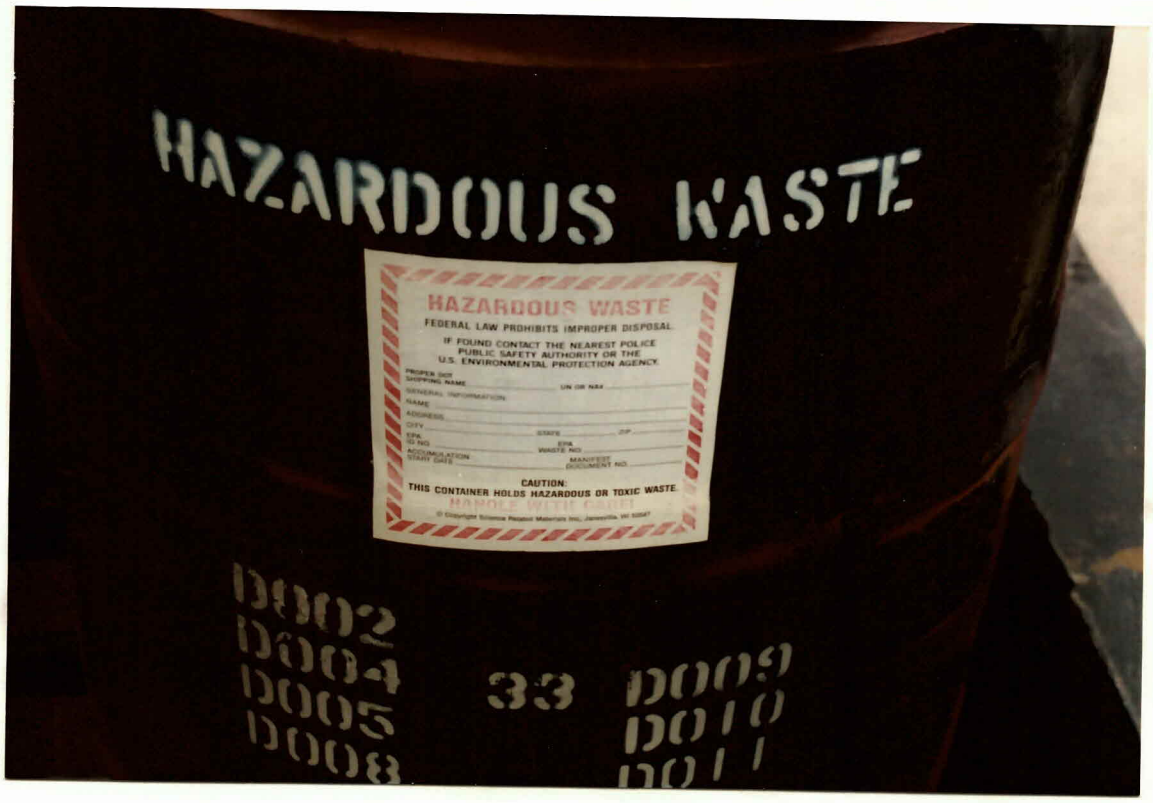
ATTACHMENT 3

EXHIBIT 2


D004 30 D01
D005 D01
HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND CONTACT THE NEAREST POLICE
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
CAUTION:
THIS CONTAINER HOLDS HAZARDOUS OR TOXIC WASTE
HANDLE WITH CARE!
HAZARDOUS WASTE
CAUTION:
HANDLE WITH CARE!


D008
10 D009
D004
D005
D007
HAZARDOUS WASTE
HANDLE WITH CARE!


HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND CONTACT THE NEAREST POLICE
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
CAUTION
THIS CONTAINER HOLDS HAZARDOUS OR TOXIC WASTE
HANDLE WITH CARE!
FLAMMABLE LIQUID


HAZARDOUS WASTE
HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.
IF FOUND CONTACT THE NEAREST POLICE
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY.
PROPER DOT SHIPPING NAME
UN OR NA#
GENERAL INFORMATION
NAME
ADDRESS
CITY
STATE
ZIP
EPA ID NO.
EPA WASTE NO.
ACCUMULATION START DATE
MANIFEST DOCUMENT NO.
CAUTION:
THIS CONTAINER HOLDS HAZARDOUS OR TOXIC WASTE.
HANDLE WITH CARE!
D002
D004
D005
D008
33
D009
D010
D011

ATTACHMENT 3

EXHIBIT 3

COMMONWEALTH OF PUERTO RICO
Environmental Quality Board
ENVIRONMENTAL QUALITY BOARD
P.O. Box 11488, Santurce, Puerto Rico 00910

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: PRD980298764 — Manifest Document No.: 87001
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address:
ELI LILLY INDUSTRIES, INC. PR01
CALL BOX 1198 PUEBLO STATION
CAROLINA, P.R. 00628-1198
4. Generator's Phone ( ) (809) 757-4000

A. State Manifest Document Number: 87001
B. State Generator's ID: PRD980298764

5. Transporter 1 Company Name: COLLAZO TRUCKING
6. US EPA ID Number: PRD980567196
C. State Transporter's ID
D. Transporter's Phone: PRD980567196
E. State Transporter's ID: (809) 769-9220
7. Transporter 2 Company Name
8. US EPA ID Number
F. Transporter's Phone

9. Designated Facility Name and Site Address:
ELI LILLY INDUSTRIES, INC.
KM. 147 Road #2 Sabanetas Ward
Mayaguez, P.R.
10. US EPA ID Number: PRD091024786
G. State Facility's ID
H. Facility's Phone: PRD091024786 (809) 834-7846

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Flammable Hazardous Waste Mixture Ethanol and Water UN-1987 ✓	4	DM	220	G	D001
b. Halogenated (Flammable) Waste Solvent N.O.S. ORM-A NA-1993 ✓	1	DF	55	G	F002, U044 F001, U231
c. Hazardous Waste Liquid N.O.S. ORM-E NA-9189 (Corrosive) ✓ X 34	1	DF	40	G	D009, D0011 D004, D008 D002, D005 D007
d. Waste Flammable Liquid (Non-Halogenated) UN-1987 ✓	1	DF	55	G	F003, D001

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above
a, b, and d - S02-T06
c - S01

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: Robinson Garcia — Signature: Robinson Garcia — Date (Month Day Year): 02 02 87

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Collazo Trucking — Signature: [illegible signature] — Date (Month Day Year): 2 2 87

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: JOSE A BORRUCS REEL / Eli Lilly Industries PR04 — Signature: [illegible signature] — Date (Month Day Year): 02 03 87

EPA Form 8700-22 (Rev. 4-85)

IN CASE OF EMERGENCY OR SPILL IMMEDIATELY CALL THE ENVIRONMENTAL QUALITY BOARD (809) ...439

GENERATOR

ATTACHMENT 3

EXHIBIT 4

Environmental Quality Board

COMMONWEALTH OF PUER. RICO
ENVIRONMENTAL QUALITY BOARD
P.O. Box 11488, Santurce, Puerto Rico 00910

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2000-0404 Expires 7-31-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: P R D 9 8 0 2 9 8 7 6 4 | 8 7 0 0 4
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ELI LILLY INDUSTRIES INC. PR01
CALL BOX 1198 - PUEBLO STATION
CAROLINA, PR
4. Generator's Phone: (809) 757-4000

A. State Manifest Document Number: 87004
B. State Generator's ID: PRD980298764

5. Transporter 1 Company Name: COLLAZO TRUCKING
6. US EPA ID Number: P R D 9 8 0 5 2 7 1 9 6
C. State Transporter's ID: PRD980527196
D. Transporter's Phone: (809) 769-9120

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
ELI LILLY INDUSTRIES INC. PR04
KM. 147 ROAD #2 SABANETA WARD
MAYAGUEZ, PR 00708
10. US EPA ID Number: P R D 0 9 1 0 2 4 7 8 6
G. State Facility's ID: PRD091024786
H. Facility's Phone: (809) 834-7846

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. FLAMMABLE HAZARDOUS WASTE MIXTURE ETHANOL AND WATER UN-1987	2	D M	1 1 0	G	D001
b. HALOGENATED (FLAMMABLE) WASTE SOLVENT N.O.S. ORM-A NA-1993	1	D F	40	G	F002, U044 F001, U231
c. HAZARDOUS WASTE LIQUID N.O.S. ORM-E NA-9189 (CORROSIVE) (36)	1	D F	35 40	G	D009, D001 D004, D008 D002, D007, D00
d. WASTE FLAMMABLE LIQUID (NON-HALOGENATED) UN-1987	1	D F	55	G	F003, D001

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: A, B, AND D - S02-T06

15. Special Handling Instructions and Additional Information
HANDLE WITH CARE, AVOID INHALATION. DO NOT HANDEL NEAR ANY OPEN FLAME OR SPARKS.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
ROBINSON GARCIA	Robinson Garcia	07 15 87

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
COLLAZO TRUCKING	Nestor Alvarez	07 17 87

18. Transporter 2 Acknowledgement or Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
JUAN PEREZ ELI LILLY INDUSTRIES, INC. PR04	Juan Perez	07 20 87

Form 8700-22 (3-84)

CALL THE ENVIRONMENTAL QUALITY BOARD (809) 725-8038

ATTACHMENT 3

EXHIBIT 5

COMMONWEALTH OF PUER RICO
ENVIRONMENTAL QUALITY BOARD
Environmental Quality Board
P.O. Box 11488, Santurce, Puerto Rico 00910

EXPIRES: 9-30-88
Form Approved: OMB NO.2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. PRD090009457 — Manifest Document No. 87012
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ELI LILLY INDUSTRIES, INC. PR02
CALL BOX 1198 - PUEBLO STATION
CAROLINA, PR 00628-1198
4. Generator's Phone (809) 757-4000

A. State Manifest Document Number: 87012
B. State Generator's ID: PRD090009457

5. Transporter 1 Company Name: COLLAZO TRUCKING
6. US EPA ID Number: PRD980527196
C. State Transporter's ID: PRD980527196
D. Transporter's Phone: (809)769-9220

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
ELI LILLY INDUSTRIES, INC. PR04
KM.147 ROAD #2 SABANETAS WARD
MAYAGUEZ, PR 00708
10. US EPA ID Number: PRD091024786
G. State Facility's ID: PRD091024786
H. Facility's Phone: (809) 834-7846

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE FLAMMABLE LIQUID N.O.S. (METHANOL/ACETONE) UN-1993	12	DM	660	G	F001
b. WASTE FLAMMABLE LIQUID N.O.S. (IBA/WATER) UN-1993	4	DM	130	G	D001
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: S02-T06

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
ROBINSON GARCIA	Robinson Garcia	07 17 87

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
COLLAZO TRUCKING	Nestor Olivero	7 17 87

18. Transporter 2 Acknowledgement or Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
JUAN PEREZ ELI LILLY INDUSTRIES, INC. PR04	Juan Perez	07 20 87

Form 8700-22 (3-84)

Environmental Quality Board

COMMONWEALTH OF PUERTO RICO
ENVIRONMENTAL QUALITY BOARD

P.O. Box 11488, Santurce, Puerto Rico 00910

Expires: 9-30-88

Form Approved: OMB NO.2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: P R D 0 9 0 0 0 9 4 5 7
Manifest Document No.: 8 7 0 1 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ELI LILLY INDUSTRIES, INC. PR02
CALL BOX 1198- PUEBLO STATION
CAROLINA, PR

4. Generator's Phone (809) 757-4000

A. State Manifest Document Number: 87011

B. State Generator's ID: PRD090009457

5. Transporter 1 Company Name: COLLAZO TRUCKING

6. US EPA ID Number: P R D 9 8 0 5 2 7 1 9 6

C. State Transporter's ID: PRD180527196

D. Transporter's Phone: (809) 769-3220

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
ELI LILLY INDUSTRIES, INC. PR04
KM. 147 ROAD #2 - SABANETAS WARD
MAYAGUEZ, PR 00708

10. US EPA ID Number: P R D 0 9 1 0 2 4 7 8 6

G. State Facility's ID: PRD091024786

H. Facility's Phone: (809) 854-7846

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE FLAMMABLE LIQUID N.O.S. (METHANOL/ACETONE) UN-1993	22	DM	1210	G	F003
b. WASTE FLAMMABLE LIQUID N.O.S. (IBA/WATER) UN-1993	1	DM	55	G	D001
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: 802-T06

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
ROBINSON GARCIA	Robinson Garcia	06 19 87

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
COLLAZO TRUCKING	Jeronima Rodriguez	06 19 87

18. Transporter 2 Acknowledgement or Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
ELI LILLY INDUSTRIES, INC PR04	Rafael Quintana	06 19 87

Form 8700-22 (3-84)

ATTACHMENT 3

EXHIBIT 6

Environmental Quality Board

COMMONWEALTH OF PUERTO RICO
ENVIRONMENTAL QUALITY BOARD
P.O. Box 11488, Santurce, Puerto Rico 00910

Please print or type (Form designed for use on elite (12-pitch) typewriter.) Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: P R D 0 9 0 4 3 6 0 6 7 — Manifest Document No.: [illegible] — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address:
ELI LILLY INDUSTRIES, INC.
CALL BOX 1198 PUEBLO STATION
CAROLINA, P.R. 00628-1198

4. Generator's Phone (809) 757-4000

A. State Manifest Document Number: 87020

B. State Generator's ID: PRD090436067

5. Transporter 1 Company Name: COLLAZO TRUCKING — 6. US EPA ID Number: P R D 9 8 0 5 2 7 1 9 0

C. State Transporter's ID: PRD980527190

D. Transporter's Phone: (809) 769-9120

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address:
ELI LILLY INDUSTRIES? INC. PR04
KM. 147 RD. #2 SABANETA WARD
MAYAGUEZ, P.R. 00708

10. US EPA ID Number: P R D 0 9 1 0 2 4 7 5 6

G. State Facility's ID: PRD091024756

H. Facility's Phone: (809) 834-7848

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
WASTE FLAMMABLE LIQUID N.O.S. (ISOPROPANOL/WATER MIXTURE) UN-1993	3 ~~2~~	B ~~TP~~	750 ~~250~~	G	D001
Nota Esto se devolvió					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: S02-T06

15. Special Handling Instructions and Additional Information
HANDLE WITH CARE, AVOID INHALATION. DO NOT HANDLE NEAR ANY OPEN FLAME OR SPARKS.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: ROBINSON GARCIA — Signature: Robinson Garcia — Date (Month Day Year): 09 03 87

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: COLLAZO TRUCKING — Signature: Nestor Alvarez — Date (Month Day Year): 09 03 87

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date (Month Day Year)

19. Discrepancy Indication Space
Devuelto. ✓

20. Facility Owner or Operator. Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: ELI LILLY INDUSTRIES, INC. PR04 — Signature: [illegible] — Date (Month Day Year): [illegible]

EPA Form 8700-22 (Rev. 9-86)

COMMONWEALTH OF PUERTO RICO
Environmental Quality Board
ENVIRONMENTAL QUALITY BOARD
P.O. Box 11488, Santurce, Puerto Rico 00910

Please print or type (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. PRD091024786 Manifest Document No. 785
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ELI LILLY INDUSTRIES, INC. PR04
KM. 147, RD. #2, SABANETA WARD
MAYAGUEZ, P. R. 00708
4. Generator's Phone (809) 834-7846

A. State Manifest Document Number
B. State Generator's ID PRD091024786

5. Transporter 1 Company Name: COLLAZO TRUCKING
6. US EPA ID Number: PRD 988052 7190
C. State Transporter's ID
D. Transporter's Phone (809) 769-9120
7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
ELI LILLY INDUSTRIES, INC.
CALL BOX 1198 PUEBLO STATION
CAROLINA, P.R. 00628-1198
10. US EPA ID Number: PRD98 043 8067
G. State Facility's ID
H. Facility's Phone (809) 757-4000

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE FLAMMABLE LIQUID N.O.S. (ISOPROPANOL/WATER MIXTURE) UN-1993	3	TP	750	G	D001
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: SC2-T06

15. Special Handling Instructions and Additional Information

HANDLE WITH CARE, AVOID INHALATION. DO NOT HANDLE NEAR ANY OPEN FLAME & PARKS

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: [illegible] GARCIA | Signature | Date Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: COLLAZO TRUCKING | Signature: [signature] | Date Month Day Year 09 04 87

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

19. Discrepancy Indication Space
Daveelto

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Date Month Day Year

Form 8700-22 (Rev. 4-85)

ENVIRONMENTAL QUALITY BOARD (809) 722-0439

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

303

May 17, 1983

PRD091024786

Mr. Harry Ruissi
Permits Administration
Branch
Environmental Protection
Agency
Region II, 26 Federal
Plaza
New York, N.Y. 10278

Dear Mr. Ruissi:

We are including all the information with regard to the Full RCRA Generator and Interim Status Reinspection, performed on March 16, 1983, to the Eli Lilly Industries Incorporated, located in Mayaguez, Puerto Rico.

Please do not hesitate to contact us for any additional information.

Cordially yours,

Eng. Bartolomé J. Cañellas
Acting Director
Land Pollution Control
Area

Enclosures

OFFICE OF THE BOARD: 204 DEL PARQUE ST. CORNER OF PUMARADA / MAILING ADDRESS: P.O. BOX 11488,
SANTURCE, PUERTO RICO 00910 / TELEPHONE: 725-5140

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

May 6, 1983

M E M O R A N D U M

TO : Eng. Luis E. de la Cruz,
Associate Member

THROUGH : Eng. Bartolomé J. Cañellas, Director
Hazardous Waste Bureau

: Mr. Beato Alvarado, Chief
Inspection, Monitoring & Surveillance
Section

FROM : Tomás Sanabria González
Chemist

SUBJECT : Eli Lilly Industries, Inc.
EPA I.D. No. PRT000010066

Eli Lilly Industries, Inc., located in Mayaguez, Puerto Rico was visited on March 16, 1983, with the purpose of performing a Full RCRA Generator and Interim Status Re-Inspection.

The following documents related to this inspection are enclosed:

(X) Transmittal letter to EPA
(X) Inspection report
(X) Notification to the industry - Letter
(X) RCRA Inspection Review Sheet GEN
(X) RCRA Generator Inspection Form
( ) RCRA Inspection Review Sheet - TRANSP.
( ) RCRA Transporter Inspection Form
(X) RCRA Inspection Review Sheet - TSD

(X) RCRA TSD Inspection Form
( ) _____
( ) Attachments:

1) Appendix No-J2
2) Appendix No-02
3) Copies of the following records:

a. hazardous waste containers inspections
b. hazardous waste storage tanks inspection log
c. daily summary of waste handling activities
d. incinerators inspection log
e. manifests

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

May 5, 1983

Mr. Vicente Díaz
Project Engineer
Eli Lilly Industries, Inc.
P.O. Box 1748
Mayaguez, Puerto Rico 00708

REF: Notice of Deficiencies

Dear Mr. Díaz:

Reference is made to the Full RCRA Generator and Interim Status Reinspection performed to your company on March 16, 1983, by technical personnel of the Land Pollution Control Area.

You are hereby informed that your company is not in compliance with Federal and Local Regulations. At the time of the inspection the following deficiencies were found:

A. Written Waste Analysis Plan

It does not include a description of the physical and chemical characteristics of the hazardous waste generated, as requested by Section 265.13, General Waste Analysis, and Rule 807 I, Chemical and Physical Analysis of the Federal and State Regulation, respectively.

B. Personnel Trainning

As required by Rule 808 C 4 of the State Regulation, all the facility personnel must take in an annual review of the initial trainning required.

At the time of the inspection, this requirement was not performed, as stated by the above mentioned rule.

C. Incinerator

We would like to know the destruction and removal efficiency for the organic hazardous waste constituents. } 264 not 265

Your company will have to comply with item A, B and C correcting the deficiencies and submitting pertinent evidence to this Board prior to May 30, 1983.

If you need further assistance, please, do not hesitate to contact us.

Cordially yours,

Bartolomé J. Cañellas
Acting Director
Land Pollution Control
Area

/mmoc

SUMMARY OF FINDINGS

On March 16, 1983, Eli Lilly Industries Incorporated, located on Road #2, Km. 146.7, Sabaneta Ward, Mayaguez, Puerto Rico, was visited in order to perform a Full RCRA Generator and Interim Status Reinspection.

During the reinspection, Mr. Vicente Díaz, Project Engineer, Mr. Felipe Belgodere, Director Chemical Operations, and Mr. Gabriel García, Project Engineer of the above mentioned company met with personnel of the Hazardous Waste Bureau, and the following information was gathered:

A. General Information

Eli Lilly Industries, Inc., of Mayaguez is part of an industrial pharmaceutical complex, which is constituted by two (2) companies, Eli Lilly Industries, and Eli Lilly and Pharmaceutical Company, all of these located in Carolina, Puerto Rico. Its matrix company is Eli Lilly and Company located in Indianapolis, Indiana, U.S.

The Eli Lilly Industries of Mayaguez EPA identification number is PRT 000010066.

The general process of the industry is based in the preparation of pharmaceuticals products (medical products) such as:

1. Propoxyphene hydrochloride
2. Propoxyphene napsylate
3. Dextro carbenol base
4. Acetohexamide, and
5. Erythromicin estolate

The raw material are processed through chemical reactions, destillations, extractions, separations and drying processes to produce intermediates and final products, which are finally sent to its matrix company in Indiana, U.S.

Actually, the industry generates only:

1. Acetone - 11,420 gal/wk
2. Ethyl ether - 265 gal/wk
3. Toluene - 1,100 gal/wk
4. Ethyl acetate - 3,000 gal/wk

(These quantities are approximates.)

If you refer to attachment #5, Schematic diagram to production facilities, we can observe the general process in which these chemical substances are used. It indicates how they are used, stored, recovered and disposed in the Waste Treatment Plant.

At respect, the industry has a biological treatment plant which consist of:

1. three (3) storage tanks, A, B, and C ?
2. neutralization pits
3. equalization lagoon (46,000 gals.)
4. oxidation lagoon (192,000 gals.)
5. clarifier (28,184.)
6. chlorination tank
7. thickner (11,986 gals.), and
8. sludge filters

(Refer to attachment #6, Waste Water Treatment Facility).

Tank A is used for acid solutions and tank B for caustic solutions control flow from tanks A and B is neutralized in a pit and passed through an equalizer. After equalization, waste flow is diluted with well water and pumped in the Oxidation Lagoon, where biological degradation takes place. From the Oxidation Lagoon, the control mixed liquor enter to the clarifier, where the clear water flows to a chloroxination tank. After chlorination, water is discharged to the Añasco River. (They do analysis of this water, refer to attachment #7, was effluent discharged to the river). This analysis includes the following parameters:

1. COD
2. BOD_5
3. TSS
4. TKN
5. TOC
6. pH

The analysis is performed each day of operation (a copy of their record, was requested, attachment #7). The concentrated mixed liquor of the clarifier is pumped back to the oxidation lagoon and to the thickner. From the thickner, the sludge is filtered through two (2) Door Oliver Vacuum Filters.

AW? The solid is placed in the container and disposed of in the Mayaguez Municipal Landfill. The filtrated residue is pumped back to the equalization lagoon.

They sample the different sections of the treatment plant. This analysis are made at 9:00 am, 1:00 pm, 5:00 pm, and 9:00 pm, (refer to the attachment #8 and 9) each day of use. The sludge generated from this treatment plant was analyzed by Orlando Laboratories, Inc., in Florida, (refer to attachment #1). It revealed that this waste is not hazardous. (Refer to attachment #10, letter sent to U.S. Environmental Protection Agency, RE: Petition of Hazardous Waste Delisting, which explain this aspect in more details).

In regard to the other wastes generated, they have been stored in steel drums, 55 gallons each, since 1974. Refer to attachment #11 and 12 where you can see the storage area. The tanks that are marked with an X, are the two (2) tanks with dikes of 12,000 gallons. These tanks are used to store solvents which are finally incinerated. The solvents of smaller concentration (diluted) are stored in steel drums in the Drum Storage Area. (Refer to attachment #12, Figure B).

Actually, they are not storing in drums. Since November, 19, 1981, they have been storing in the superficial tanks (8' diam) above mentioned for incineration.

B. Information Related With Inspection Performed on July 8, 1981

At the time of the inspection they were constructing a Drum Storage Area. (Refer to attachment #11 and 12). It has dimensions of 40' x 100', a dike and a collection dike for spill, which connect with the hazardous waste storage tank. This area is outdoors, and near by there is a fire hose in case of emergency.

There were stored approximately (800) eight hundred 55 gallons steel drums. As we mentioned previously, they have hazardous waste since 1974. Now they are changing the damaged corroded steel drums for new ones and labeling them for storage. Finally they would incinerate them. If you refer to attachment #13, you can observe the hazardous waste list, quantity, physical

state, kind of containers and condition and the identification. These are the only documents that the industry has of their hazardous waste.

They use an internal codification system for that, for example:

A- 1 is acetone residues from T-30 (T-30 is a process).

The industry has a Brule incinerator and a thermal research incinerator (for final disposal methods). All wastes incinerated comes from the above mentioned hazardous waste tanks. The only documents that they have at respect, is the attachment #14, Fuel Consumption and percent Sulfur content report, and the attachment #15 for the Brule incinerator, which is a small record of the operational hours.

During the inspection we observed that one of the hazardous storage tank was leaking. Mr. Díaz gave instructions for reparations.

At the time of the inspection, the industry had only received one shipment from Eli Lilly Industries of Carolina. It consisted of: flammable liq. NOS, liq. 220 gallons, F005. I requested a copy of the manifest used, but Mr. Díaz could not find it. I had previous knowledge of the existance of this manifest, because we have copy of it in our office. If you refer to attachment #3, used by the company. It has all the requirements required in the manifest system.

In relation with the documents requested in Part 265 (Standard for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities) of the Federal Register, of May 19, 1980, Eli Lilly of Mayaguez did not have the following documents:

1. Written Waste Analysis Plan
2. Operating Record of the Hazardous Waste Treatment, Storage and Disposal
3. Closure Plan
4. General Inspection Records for Treatment, Storage and Disposal of Hazardous Waste
5. Revision of the most recent chemical analysis performed of their hazardous wastes

6. Documentation on Personnel Trainning on Hazardous Waste Handling

All these sections are articles of the above mentioned Federal Register. Since the industry did not have these documents, we consider the industry in violation of Part 265, of the Federal Regulation.

C. Information Related With Inspection Performed on August 24, 1982:

At the time of the inspection, the Drum Storage Area constructed. (For description, refer to Part B, information related with inspection performed on July 8, 1981). All the steels drums were in good conditions and labelled.

In regard to the Brule incinerator, the industry has all the records and inspections required by Subpart O, Section 265.340 - 265.351. Refer to the Hazardous Waste Management Plan, which include copy of these records and inspections.

In relation with the documents requested in Part 265 (Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities) of the Federal Register, of May 19, 1980, Eli Lilly of Mayaguez did not have the Written Waste Analysis Plan, according to Section 265.13, of the above mentioned Federal Register. At this respect, Mr. Díaz was informed. He indicated that the same will be submitted to our Program on November, 1982, since they are using some laboratories of United States for the development of the chemical analysis.

D. Information Related With Inspection Performed On March 16, 1983

At the time of the inspection, all records stipulated in the Hazardous Waste Management Plan submitted by the company during other inspections were evaluated. These were:

a. Hazardous waste containers inspections
b. Hazardous waste storage tanks inspection log
c. Daily summary of waste handling activities
d. Incinerators inspection log, and
e. manifest system

Copies of each one of these above mentioned items were required. They were evaluated and they are in compliance with Federal and State Regulation.

During the inspection forms of the 1982, Generator and TSD/ Facility State Annual Report wa given to Mr. Díaz. At this respect, we indicated him that Eli Lilly Industries, Ind., had thirty (30) days upon the receipt of these forms to submit them duly completed to our Program. In addition, our orientation in regard to how file the manifiest systems was given, since they were evaluated, during the inspection, and some deficiencies were found.

A discussion in regard to the Written Analysis Plan was performed. We indicated to Mr. Díaz, that this document was required by Section 265.13 of the 40 CFR of May 19, 1980. During the conversation a description of its context was given.

In this regard, Mr. Díaz gave us two appendixs (No. J-2 and O-2), neither one were included in the Hazardous Waste Management Plan of 6-2-82, (revised version).

These appendixs included:

a) Waste to be sample
b) Sampling procedure
c) Parameters to be analyzed
d) Sampling methods
e) Frequency

According to the submitted Appendix No. O-2, the waste analysis for incineration should be performed on a campaing basis. Therefore the company should performed a hazardous waste chemical analysis each time that the campaign changes

Those analysis must be included in the Written Waste Analysis Plan. We indicate that such analysis can be ammended i.e.. When the campaign changes, a new hazardous waste chemical analysis is must be performed an included in the document in regard.

At this respect, the industry will performed the chemical analysis required in this section, according to the requirements of those appendixs. This chemical analysis will included a description of the physical and chemical characteristics of the hazardous waste generated.

In regard to the functioning of the incinerator, we wanted to know the destruction and removal efficiency for the organic hazardous waste constituents.

At this matter Mr. Díaz indicated, that this information will be submitted later, since at this moment, he did not know exactly.

In addition we indicated that according to Rule 808 C 4, facility personnel must take part in an annual review of the initial trainning required.

At the time of the inspection, the requirement was not performed as stated by the above mentioned Rule. To this matter, the industry requested a period of time to perform the necessary steps with its consult company (Engineering Sciences in U.S.A.)

The hazardous waste storage area was inspected, and had four, fifty-five steels gallons drums, which arises of Eli Lilly Industries of Carolina. Copies of the manifest system used by Eli Lilly of Carolina are included. The EPA I.D. No. of these manifest needs to be corrected since the industry filled this items with PCT instead of PRT. We indicated to Mr. Díaz, that PCT is incorrect, since this capital letter means Puerto Rico. This drums were in good conditions and properly labelled. Eli Lilly Industries of Mayaguez had records and located plan of this drums inside the hazardous waste storage area.

During the inspections performed on July 8, 1981, and August 24, 1982, we had find a lot of hazardous waste contains stored.

At this time, as we mentioned previously, only four, 55 steels gallons drums were found, since Eli Lilly of Mayaguez incinerated all the waste that can be incinerated, and the remaining were disposed of in Servicios Carbareón. Copies of the manifest are included. Two shipments were performed on October 21, and 22, 1982. The waste disposed were:

a. waste acetone residues - flammable
b. hazardous waste - liquid

A total of 130,175 and 35,841 pounds of waste respectively.

RCRA INSPECTION REVIEW SHEET

Name of Facility - Eli Lilly Industries, Inc.

RCRA ID Number - PRT 000010066

Date of Inspection - March 16, 1983

Type of Inspection: Generator X Transporter ____ TSD ____

Name of EPA/State Inspector:

Mr. Tomás Sanabria González
Chemist
Environmental Quality Board
Santurce, Puerto Rico

Findings of Inspection:

As Generator of hazardous waste, the industry is not in compliance with Section 262 (Standards Applicable to Generators of Hazardous Waste) of the Federal Register, of May 19, 1980, and Rule 808 of the state regulation. (Annual Review Trainning). Refer to RCRA Inspection Review Sheet.

Action(s) Taken:

Action(s) Recommended:

RCRA INSPECTION REVIEW SHEET

Name of Facility - Eli Lilly Industries, Inc. - Mayaguez

RCRA ID Number - PRT 000010066

Date of Inspection - March 16, 1983

Type of Inspection: Generator ____ Transporter ____ TSD X

Name of EPA/State Inspector:

Mr. Tomás Sanabria González
Chemist
Environmental Quality Board
Santurce, Puerto Rico

Findings of Inspection:

As TSD/Facility, the industry is not in compliance with Section 265, of the Federal Register, of May 19, 1980, since the Written Waste Analysis Plan does not comply with the requirements of Section 265.13 of the above mentioned Federal Register.

At the time of the inspection, the industry did not have performed the annual review of trainning requested by Rule 808 C 4 and 265.16 - Personnel Trainning of the State and Federal Regulation, respectively.

NOTE: A notice of deficiencies was sent to Mr. Vicente Díaz, Project Engineer of the company in which a period of time (until May 30, 1983) is gave to correct and submit evidence to our Program, that these deficiencies have been corrected.

If at the end of this time, the industry does not comply the case will be refered to the Puerto Rico Environmental Quality Board Lawful Affairs.

Action(s) Taken:

Action(s) Recommended:

RCRA INSPECTION FORM

Report Prepared for:

Generator ☑

Transporter ☐

HWM (TSD) facility ☑

Copy of report sent to the facility ☐

Facility Information

Postal Address:
P.O. Box 1748
Mayaguez, PR
00708

Local

Name: Eli Lilly Industries, Inc.,

Address: State Rd. No. 2 Km 14.7
Mayaguez, P.R

EPA ID#: PRT 000010066

Date of Inspection: March 16, 1983

Participating Personnel

State or EPA Personnel: Mr. Tomás Sanabria González
Chemist

Facility Personnel: Mr. Vicente Díaz
Project Engineer

Report Prepared by Name: Mr. Tomás Sanabria González

Agency: E. Q. B.

Telephone #: 725-5140 ext. 314 or 290

Approved for the Director by:

Is there reason to believe that the facility has hazardous waste on-site?

a. If yes, what leads you to believe it is hazardous waste? Check appropriate boxes:

☑ Company admits that its waste is hazardous during the inspection.

☑ Company admitted the waste is hazardous in its RCRA notification and/or Part A Permit Application.

☑ The waste material is listed in the regulations as a hazardous waste from a nonspecific source (§261.31) (F002 , F003 and F005).

not apply ☐ The waste material is listed in the regulations as a hazardous waste from a specific source (§261.32)

not apply ☐ The material or product is listed in the regulations as a discarded commercial chemical product (§261.33)

not apply ☐ Testing has shown characteristics of ignitability, corrosivity, reactivity or extraction procedure toxicity, or has revealed hazardous constituents (please attach analysis report)

not apply ☐ Company is unsure but there is reason to believe that waste materials are hazardous. (Explain)

GENERATOR INSPECTION CHECKLIST

	YES	NO	N/A
40 CFR 262 Subpart A-General			
262.11 - Hazardous waste determination			
1) Did the generator test its waste to determine whether it is hazardous?	✓		
Is the waste hazardous?	✓		
2) Is the generator determining that its waste exhibits a hazardous waste characteristic(s) based on its knowledge of the material(s) or processes used?	✓		
40 CFR 262 Subpart B-The Manifest			
Has hazardous waste been shipped off-site since November 19, 1980?	✓		
If yes, approximately how many shipments, off-site, have been made and describe the approximate size of an average shipment made on a monthly basis. If facility is a small quantity generator, please explain.			
The company performed 2 shipments (for name of waste and quantity, please refer to the inspection report).			
262.21 Does each manifest (or representative sample) have the following information? Please circle the missing elements.			
— a manifest document number?	✓		
— the generators name, mailing address, telephone number and EPA I.D. Number?	✓		
— the transporters name and EPA I.D. Number?	✓		
— the name, address and EPA ID Number of the designated facility?	✓		
— a description of the wastes (DOT)?	✓		
— the total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle?	✓		
— a certification that the materials are properly classified, described, package, marked and labeled, and are in proper condition for transportation under regulations of the DOT and EPA?	✓		
(obtain a copy of the incomplete manifests)			
40 CFR 262 - Subpart D - Recordkeeping and Reporting			
262.40 Has the generator maintained facility records since Nov. 19, 1980? (manifest, exception report and waste analysis)	✓		
262.42 Has the generator received signed copies (from the TSD facility) of all the manifests for waste shipped off-site more than 35 days ago?	✓		
If not, have Exception Reports been submitted to EPA covering any of these shipments made more than 45 days ago?			✓

	YES	NO	N/A

40 CFR 262 - Subpart C - Pretransportation Requirements

262.30-33 Before transporting or offering hazardous waste for transportation off-site does the generator:

1) Package the waste in accordance with applicable DOT regulations (i.e., 49 CFR Parts 173, 178 & 179) ✓

2) Label each package according to DOT (i.e., 49 CFR 172) ✓

3) Mark each package according to DOT (i.e., 49 CFR 172) ✓

4) Mark each container of 110 gallons or less with the words "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. EPA," and include the generators name, address and manifest document number. (i.e., 49 CFR 172.304) ✓

262.34 Accumulation Time

1) How is waste accumulated on-site?

☑ Containers

☑ Tanks

☐ Surface impoundments (complete BMP checklist)

☐ Piles (complete BMP checklist)

2) Is waste accumulated for more than 90 days? ✓

If yes, complete BMP checklist

3) Is each container clearly dated with each period of accumulation so as to be visible for inspection? ✓

4) Is each container or tank marked or labeled with the words "hazardous waste" or in compliance with the DOT labeling requirements? ✓

STOP HERE IF THE HAZARDOUS WASTE MGT FACILITY (TSD) CHECKLIST IS FILLED OUT

(Facilities Subject to 40 CFR 265 Standards)

	YES	NO	N/A

40 CFR Part 265 Subpart B General Facility Standards

265.13–General Waste Analysis

1) Is there a detailed chemical and physical anaylsis of a representative sample of the waste or each waste? (At a minimum this analysis must contain all the information necessary for proper management of the waste) — ✓

2) Does the character of the waste handled at the facility change from day to day, week to week, etc., thus requiring frequent testing? yes.
The company changes its production therefore its hazardous waste. - at this respect, the industry are taking action. (Refer to the inspection report).
You may check only one

Waste characteristics vary ✓
All waste are basically the same
Company treats all waste as hazardous

3) Is there a written waste analysis plan at the facility? ✓

Does it contain the following:

a) Parameters for each waste to be analyzed and the rationale for the selection of these parameters. ✓

b) Test methods used to test these parameters. ✓

c) Sampling methods to obtain a representative sample of the waste to be analyzed. ✓

d) Frequency of repeated analysis to ensure accurate and current information. ✓

4) Does hazardous waste come to this facility from an outside source? e.g. another generator. ✓

5) If waste comes from an outside source, are there procedures in the plan to insure that waste received conforms to the accompanying manifest? ✓

265.14–Security

1) Is there: a) a 24-hour surveillance system? or,

b) a suitable barrier which completely surrounds the active portion of this facility? ✓

2) Are there "Danger–Unauthorized Personnel Keep Out" signs posted at each entrance to the facility? ✓

If no, explain what measures are taken for security.

265.15 – General Inspections Requirements

1) Does the facility have a written inspection schedule? ✓

2) Does the schedule identify the types of problems to be looked for and the frequency of inspections? ✓

3) Does the owner/operator record inspections in a log? ✓

4) Is there evidence that problems reported in the inspection log have been remedied? ✓

265.16 - Personnel Training	YES	NO	N/A
1) Have facility personnel successfully completed a program of classroom instruction or on-the-job training within 6 months of having been employed?	✓		
If yes, have facility personnel taken part in an annual review of training?		✓	
2) Is there written documentation of the following:			
—job title for each position at the facility related to hazardous waste management and the name of the employee filling each job?	✓		
—type and amount of training to be given to personnel in jobs related to hazardous waste management?	✓		
—actual training or experience received by personnel?	✓		
3) Are training records kept on all employees for at least 3 years?	✓		

265.17-General Requirements for Ignitable, Reactive or Incompatible Wastes	YES	NO	N/A
1) Are there ignitable, reactive or incompatible waste on site?		✓	
If yes, what are the approximate types and quantities and location of the waste.			
2) Have precautions been taken to prevent accidental ignition or reaction of ignitable or reactive waste?	✓		
If no, please explain.			
3) In your opinion, are proper precautions taken so that these wastes do not:			
— generate extreme heat or pressure, fire or explosion, or violent reaction?	✓		
— produce uncontrolled toxic mist, fumes, dusts or gases in sufficient quantities to pose a risk of fire or explosions?	✓		
— damage the structural integrity of the device or facility containing the waste?.	✓		
— threaten human health or the environment?	✓		

40 CFR 265 - Subpart C - Preparedness and Prevention

	YES	NO	N/A
265.32 Does the facility comply with preparedness and prevention requirements including maintaining:			
— an internal communications or alarm system?	✓		
— a telephone or other device to summon emergency assistance from local authorities?	✓		
— portable fire equipment?	✓		
— water at adequate volume and pressure to supply water hose streams, foam producing equipment, etc.	✓		
265.33 Is equipment tested and maintained?	✓		
265.34 Is there immediate access to communications or alarm systems during handling of hazardous waste?	✓		
265.35 Adequate aisle space?	✓		
If no, please explain storage pattern.			
In your opinion, do the types of waste on-site require all of the above procedures, or are some not needed: Explain.			

Yes, because the wastes handled by the company are hazardous. (Ignitability).

40 CFR 265 - Subpart D - Contingency Plan and Emergency Procedures

Does the facility have a written contingency plan for emergency procedures designed to deal with fires, explosions or any unplanned release of hazardous waste?	✓		
1) Does the plan describe arrangements made with the local authorities?	✓		
2) Has the contingency plan been submitted to the local authorities?	✓		
3) Does the plan list names, addresses and phone numbers of Emergency Coordinators?	✓		
4) Does the plan have a list of what emergency equipment is available?	✓		
5) Is there a provision for evacuating facility personnel?	✓		
6) Was there an emergency coordinator present or on call at the time of the inspection?	✓		

40 CFR 265 Subpart E-Manifest System, Recordkeeping and Reporting

265.71 - Use of the Manifest

1) Has the facility received hazardous waste from an off-site source since November 19, 1980?	✓		
If no, skip to 265.73 - Operating Record			
2) If yes, does it appear that the facility has a copy of a manifest for each hazardous waste load received?	✓		
If not, please explain.			

(Indicate if the number is large) 3

4) Does each manifest have the following information? (circle missing information)

— a manifest document number? ✓ — —

— the generators name, mailing address, telephone number and EPA I.D. #? ✓ — —

— the transporters name and EPA I.D. Number? ✓ — —

— the TSD name, address, telephone number & EPA I.D. Number? ✓ — —

— a description of the waste (DOT)? ✓ — —

— the total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded; into or onto the transport vehicle? ✓ — —

— a certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the DOT and EPA? ✓ — —

(Obtain a copy of the incomplete manifests)

265.72 - Manifest Discrepancies

Have there been significant discrepancies between the quantity and type of waste received and the waste identified on the manifest? — ✓ —

Describe unreconciled descrepancies.

265.73 - Operating Record

1) Does the facility keep an operating record? ✓ — —

2) Does the record contain the following information:--

a) Description and quantity of waste on-site and the method(s) and date(s) of its Treatments, Storage & Disposal? ✓ — —

b) The location and quantity of each hazardous waste at each location? ✓ — —

c) Records and results of waste analysis and trial tests performed and identified in the waste analysis plan? ✓ — —

d) Summary reports and details of all incidents that require implementing the contingency plan.

e) Records and results of inspections for the past 3 years or November 19, 1980 which ever is less? ✓ — —

f) Monitoring, testing or analytical data where required for:

Groundwater, Land Treatment, Incinerators, and Thermal Treatment? — — ✓

265.76 - Unmanifested Waste Report

Has the facility accepted hazardous waste from off-site sources without a manifest? — ✓ —

If yes, has the facility submitted an unmanifested waste report? — — ✓

40 CFR 265 Subart F - Groundwater Monitoring

YES NO N/A

(Applies only to surface impoundments, landfills and/or land treatment facilities.)

Is a groundwater monitoring plan available at the facility? — — ✓

If yes, please fill out the appropriate Groundwater Monitoring Questionnaire and attach to this report.

40 CFR 265 Subart G - Closure and Post-Closure

265.111 Closure Performance Standard

Have any portions of the facility been closed since November 19, 1980? — ✓ —

If yes, please explain

not apply

265.112 - Closure Plan

Does the facility have a written closure plan? (Applies to all types of TSD facilities) ✓ — —

If yes, does the written plan include:

1. A description of how and when the facility will be partially (if applicable) and ultimately closed? ✓ — —
2. An estimate of the maximum inventory of wastes in storage or treatment at any time during the life of the facility? ✓ — —
3. A description of the steps necessary to decontaminate facility equipment during closure? ✓ — —
4. A schedule for final closure including the anticipated date when waste will no longer be received and when final closure will be completed? ✓ — —
5. Does the owner/operator have a written estimate of of the cost of closing the facility? ✓ — —

If yes, what is it? ($) 72,000.00

265.118 - Post Closure Plan

Does the facility have a written post-closure plan? (Applies only to disposal facilities) — — ✓

If yes, Does the Plan:

1. Identify the activities which will be carried on after closure and the frequency of these activities? — — ✓
2. Include a description of planned groundwater monitoring activities and their frequency during post-closure? — — ✓
3. Include a description of planned maintenance activities and frequency to insure integrity of final cover during post-closure? — — ✓
4. Include the name, address and phone number of a person or office to contact during post-closure? — — ✓
5. Does the owner/operator have a written estimate of the cost of post-closure for the facility? — — ✓

If yes, what is it? ($)

Please circle all appropriate activities and answer questions on indicated pages for all activities circled.

Storage	Treatment	Disposal
Container - pg 6	Tank - pg 7	Landfill - pg 11
Tank, above ground-pg 7	Surface Impoundment-pg 8	Land Treatment - pg 10
Tank, below ground-pg 7	Incineration - pg 12	Surface Impoundments - pg 8
Surface Impoundments-pg 8	Thermal Treatment- pg 12	Other _____
Waste Piles - pg 9	Land Treatment - pg 10	
Other _____	Chemical, Physical and Biological Treatment - pg 13	
	Other _____	

40 CFR 265 - Subpart I - Containers

	YES	NO	N/A
1) – What type of containers are used for storage. Describe the size, type, quantity and nature of waste (e.g. 12 fifty-five gallon drums of waste acetone) 4, fifty five gallon drums of D009, D011, D005, D004, D007 D008, F002-F001- U044, U231			
2) – Is there a containment system for spills, leaks and precipitation?		✓	
If yes, describe. not apply			
265.171 – Do the containers appear to be in good condition, not in danger of leaking?	✓		
If not, please describe the type, condition and number of leaking or corroded containers. Be detailed and specific. not apply			
265.172 – Are hazardous waste stored in containers made of compatible materials?	✓		
If not, please explain. not apply			
265.173(a) – Are all containers closed except those in use?	✓		
265.173(b) – Do containers appear to be properly opened, handled or stored in a manner which will minimize the risk of the container rupturing or leaking?	✓		
265.174 – Is the storage area inspected at least weekly?	✓		
265.176 – Are containers holding ignitable and reactive waste located at least 50 feet (15 meters) away from the facility's property line?	✓		
265.177 – Are incompatible wastes stored separate from each other?			✓
If no, explain not apply			

1) What type of incinerator or thermal treatment is at the site (e.g water-wall incinerator, boiler, fluidized bed, ...)

Thermal Research Incinerator Boiler

2) List the types and quantities of EW incinerated or thermally treated.

Types - ignitability
quantities - 60 gallons per hours.

3) Is the residue from the incinerator thermal treatment unit a hazardous waste? ✓ ___ ___

4) What types of air pollution control devices (if any) are installed in the incinerator/or thermal treatment unit?

Scrubber

5) Is energy recovered from the process? If yes, describe. ___ ✓ ___

not apply

6) What is the destruction and removal efficiency for the organic hazardous waste constituents?

at the time of the inspection, the company did not have the above information

265.341 and 265.375 – Does the operating record include additional analysis' to determine types of pollutants which might be emitted including:

- heating value of the waste? ✓ ___ ___
- halogen and sulfur content? ✓ ___ ___
- concentrations of lead and mercury? ✓ ___ ___

If no to any of the above questions is there justification and documentation? ✓ ___ ___ at this respect the industry performed a chemical analyses.

265.345 and 265.373 If operating, does it appear the incinerator/or thermal treatment unit is operating at steady state for conditions of operation, including temperature and air flow? ✓ ___ ___

265.347 and 265.377 – Monitoring and Inspection

1) Are existing instruments relating to combustion and emission controls monitored every 15 minutes? ✓ ___ ___

If no, explain

not apply

2) Does the incinerator/thermal treatment have all the following instruments for measuring: wastefeed, auxiliary fuel feed air flow, incinerator temperature scrubber flow, and scrubber pH? (Circle missing instruments) ✓ ___ ___

If no, explain.

not apply

3) Is the stack plume observed visually at least hourly for opacity and color? ✓ ___ ___

4) Are there any signs of leaks, spill and fugitive emissions associated with the pumps, valves, conveyors, pipes etc? If yes, describe. ___ ✓ ___

not apply

5) Are all emergency shutdown controls and system alarms checked to assure proper operation? ✓ ___ ___

6) Is there any reason to believe the incinerator is being operated improperly? i.e., steady state conditions are not maintained: ✓ ___ ___
If yes, explain.

A 1 the incinerator/thermal treatment inspected daily ✓ ___ ___

40 CFR 265 Subpart J - Tanks

	YES	NO	N/A

265.190 1) What are the approximate number and size of tanks containing hazardous waste?

2 tanks no. 7 and no. 14 of 12,000 gallons of capacity each one.

2) Identify the waste treated/stored in each tank.

The waste is a mixture of: toluene; Benzyl Chloride, Ethyl Chloroformate and phosphorus oxychloride

265.192 - General Operating Requirements

	YES	NO	N/A
1) Are the tanks maintained so that there is no evidence of past, present, or risk of future leaks?	✓		
If no, please explain. not apply			
2) Are there leaking tanks?		✓	
3) Are all hazardous wastes or treatment reagents being placed in tanks compatible with the tank material so that there is no danger of ruptures, corrosion, leaks or other failures?	✓		
4) Do uncovered tanks have at least 2 feet of freeboard or an adequate containment structure?			✓
5) If waste is continuously fed into a tank, is the tank equipped with a means to stop the inflow from the tank? e.g. bypass system to a standby tank	✓		

265.194 - Inspections

	YES	NO	N/A
1) Is the tank(s) inspected each operating day for			
a) discharge control equipment	✓		
b) monitoring equipment	✓		
c) level of waste in tank	✓		
2) Are the tanks and surrounding areas (e.g., dike) inspected weekly for leaks, corrosion or other failures?	✓		
3) Are there underground tanks?		✓	
If yes, how many and can they be entered for inspection?			✓

265.198 - Are ignitable or reactive wastes stored in a manner which protects them from a source of ignition or reaction? ✓

If no, please explain.

265.199 - Does it appear that incompatible wastes are being stored separate from each other? ✓

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

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August 15, 1986

M E M O R A N D U M

TO : Mr. Carlos R. Vázquez Ayala
Director
Land Pollution Control Area

THROUGH : Yazmín López
Acting Director
Hazardous Waste Division

: Ivette De Jesús, Chief
Inspection, Monitoring and
Surveillance Section

FROM : Damaris Maldonado Viñas
Environmental Inspector

SUBJECT : ELI LILLY INDUSTRIES, INC.
MAYAGUEZ - PRD 091024786

The above mentioned facility was visited on June 30, 1986, with the purpose of performing a Full RCRA Generator and TSD Facility Inspection.

The following documents related to this inspection are enclosed:

- Inspection Report
- Notification to the industry
- RCRA Generator and TSD Inspection Form
- Copy of Part "A" Permit Application

RCRA INSPECTION REPORT

Report Prepared for:

Eli Lilly Industries, Inc.

Location:

Road No. 2 Km. 146
Sabanetas
Mayaguez, Puerto Rico

Mailing Address:

P. O. Box 1748
Mayaguez, Puerto Rico 00708

Telephone:

(809) 834-7846

Type of Inspection:

A full RCRA inspection was conducted to Eli Lilly Industries, Inc. as Generator and TSD Facility.

E.P.A. I.D. Number:

PRD 091024786

Date of Inspection:

June 30, 1986

Participating Personnel:

Mr. José J. Rivera - Eng. Manager

Mr. Gabriel García - Project Eng.

E.Q.B. or E.P.A. Personnel:

Damaris Maldonado Viñas

Report Prepared by:

Damaris Maldonado Viñas
Environmental Inspector

Company's type of process:

Eli Lilly Ind., Inc., produce pharmaceuticals products such as: Darvon, Ilosone, Acetohexamide and Cephalexin.

Process where the HW are generated:

The hazardous wastes are generated from the distillations extractions, separations and drying processes.

GENERATOR STANDARDS

Subpart A - General

262.11/702 B (1) - Hazardous Waste Determination

To determine that the wastes are hazardous, the company used the following methods:

- Acetone, Toluene, Spent Solvent - These wastes are listed in the regulation as hazardous waste, with hazardous waste number F002.

- Ethyl Acetate, Ethyl Ether - Thesewastes are listed in the regulation as hazardous wastes with hazardous waste number F003.

- Toluene - This waste is listed in the regulation as a hazardous wastes with hazardous waste number F005.

- Alcohols and Hexane - Exhibit Ignitability characteristic (D001).

- Piridine - Toxic waste with hazardous waste number D004.

- Chromium - With hazardous waste number D007.

- Lead - With hazardous waste number D008.

- Mercury - With hazardous waste number D009.

- Selenium - With hazardous waste number D010.

- Silver - With hazardous waste number D011.

- Phosphoric Acid - Corrosive waste with hazardous waste number D002.

262.12/702 C (1) (2) - EPA Identification Numbers

EPA assigned the following identification number: PRD 091024786.

Subpart B - The Manifest

262.20 - 262.23/703 - General Requirements and Use

Eli Lilly Ind., Inc., has record of all manifests sent by Eli Lilly of Carolina, Puerto Rico for wastes incinerated.

Subpart C - Pre-Transport Requirements

262.30 - 262.33/704 (A) (B) (C) - Packaging, Labeling, Marking, Placarding

Eli Lilly Indc., Inc., received all the steel containers of 55 gallons with the labels in accordance with applicable Department of Transportation regulation. The containers were marked with "Hazardous Wastes" Lable.

262.34/704 (D) - Accumulation Time

Eli Lilly Ind., Inc. accumulates hazardous waste for more than 90 days, therefore, it is an operator of a storage facility.

Subpart D - Record Keeping and Reporting

262.40/504 A (1) (2) - Recordkeeping

Eli Lilly Ind., Inc., keep a copy of each manifest signed since 1981.

262.41/503 A - Annual Report

Eli Lilly Ind., Inc., submitted the annual report to the Environmental Quality Board on March 3, 1986. They have records premium annual reports.

262.41/504 B - Exception Reporting

Eli Lilly did not have to submit and Exception repor at this time.

TSD FACILITY STANDARDS

Subpart B - General

265.13/807 I - Waste Analysis

The waste analysis plan specifies the test methods, sampling methods, frequency of analysis and parameters to be used for analysis.

265.14/803 D - Security

Eli Lilly Ind., Inc., maintains and effective surveillance program 24 hours per day. This facility has a barrier fence to control entry. The gate is operated by remote control from a guard house.

Three (3) signs with the legend "Danger Unauthorized Personnel Keep Out" both in English and Spanish are posted at the storage area although these signs were found deteriorated.

265.15/803 F - General Inspection Requirements

Eli Lilly Ind., Inc., has a written inspection schedule which identifies the items to be inspected and the frequency of inspection. It also identifies they types of problem which may be prevalent during the inspection. Eli Lilly, Ind., Inc., records all inspections in a weekly inspection log which includes date, time of the inspection, the name of the inspector and comments for any remedial action inspection. In general Eli Lilly Ind., Inc., meet the general inspection requirements specified in 265.15/803 F.

PERSONNEL TRAINING

265.16/808 (B) (C) - Personnel Training

Record review reveals that Eli Lilly Ind., Inc., personnel completed classroom instruction and on the job training within six (6) months of being employed. Eli Lilly, Ind., Inc., maintain written documentation of job title for each position, the name of the employee filling each job type received by personnel. These recoreds are kept in the facility but no written evidence of the content of training was shown. Therefore, Eli Lilly, Ind., Inc., does not meet the require information specified in 265.16/808 C.

Subpart C - Preparedness and Prevention

265.31/810 B - Maintenance and Operation of Facility

In general Eli Lilly Ind., Inc., is maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non sudden release of hazardous waste.

265.32/810 C - Required Equipment

Eli Lilly Ind., Inc., has internal alarm system, telephones, walkie talkies for the personnel and fire extinguishers near to the storage area. Water at adequate volume and pressure to supply water hose streams was available.

265.33/810 D - Tasting and Maintenance of Equipment

All the available emergency equipment is listed and maintained weekly to assure its operation in time of emergency.

265.34/810 E - Access to Communications or Alarm System

The personnel involved in the operation of HW activities have immediate access to an emergency communication device such as telephone.

265.35/810 F - Required Aisle Space

Eli Lilly Ind., Inc., facility maintains adequate aisle space to allow the unobstructed movement of personnel in the storage area.

267.37/810 G - Arrangements with Local Authorities

Evidence of arrangements with local authorities were not shown. Therefore, the company was found in violation to this section.

Subpart E - Manifest System, Recordkeeping and Reporting

265.71/540 A - Use of Manifest System

Eli Lilly Industries, Inc., has copies of Manifests of all hazardous waste received in their facility. These were evaluated and found that contain all the information concerning the manifest system.

265.72/504 (D) - Manifest Discrepancies

Manifest discrepancies had not happened.

265.73/502 (C) - Operating Records

Eli Lilly Ind., Inc., keep daily record of all operations. These records provide a discreption of type and quantity of each hazardous waste stored at the facility.

265.74/505 (B) (C) (D) - Availability, Retention, and Disposition of Records

All records were available at the time of inspection.

265.75/503 A - Annual Report

Eli Lilly Ind., Inc., keep record of annual reports.

Subpart D - Contingency Plan and Emergency Procedures

265.52/207 - Content of Contingency Plan

The Plan describe the actions facility personnel must take to comply in the implementation of the Contingency Plan. This Plan must be updated for the Emergency and Alternate Coordinator names. It does not contain the evacuation Plan. Therefore, is not in compliance with this section.

265.53/207 (2) - Copies of Contingency Plan

Copies of the Contingency Plan were available during the inspection.

265.54 a/803 E - Amendments of Contingency Plan

The Contingency Plan is under provision by the Emergency Coordinator.

265.55/803 E (1) - Emergency Coordinator

At the time of the inspection the emergency coordinator was present.

265.56/803 E (2) - Emergency Procedures

Written emergency procedures, were shown to the inspector.

Subpart G - Closure

265.11 - 265.115/ 805 - General

The Plan describes how and when the facility will be partially closed. It has an estimate of the maximum inventory of wastes in tanks containers and for the incinerator during the life of the facility and a cost estimate.

Subpart H - Finantial Requirements

265.142/806 - General

It is under E.Q.B. evaluation.

Subpart I - Use and Management of Containers

265.171/812 C (1) (2) (4) - Condition of Containers

Drums stored were found in good conditions at the moment of the inspection. No leaks were observed the drums. Were stored over wooden pallets and covered. The following wastes were found at the time of the inspection:

No. of Drums	Waste	Date generated
46	Methanol/Acetone	6/6/86
23	Mercury, Silver, Lead	1985

265.172/812 C (4) - Compatibility of Waste with Containers

Containers stored in Eli Lilly appear to be compatible with the hazardous waste stored. No signs of reaction were observed.

265.173/812 D (1) (2) - Management of Containers

Containers holding hazardous waste were closed at the moment of the inspection.

265.174/812 E - Inspections

Eli Lilly Ind., Inc., personnel inspect the storage facility according to their inspection schedule (weekly) in compliance with this section.

265.176/812 B (5) - Special Requirements for Ignitable or Reactive Waste

The containers holding ignitable waste are located at more than 50 feet from the facility's property line.

265.177/812 D (3) - Special Requirements for Incompatible Wastes

This section is not applicable to Eli Lilly since none of the waste stored at this facility are incompatible.

STATE REQUIREMENTS

SR - 502 (A) - Hazardous Waste Generation Records

Eli Lilly Ind., Inc., has records of all hazardous wastes generated.

Subpart J - Tanks

265.192/813 B - General Operating Requirements

Eli Lilly maintains evidence of general operating requirements of past, present, or risk of future leaks.

265.194/813 C - Inspections

The tanks (3) are inspected for dishcarge control equipment, monitoring equipment, level of waste in tank, construction of materials of the tanks. The tanks and surrounding areas (e.g. dike) are inspected weekly for leaks, corrosion or other failures.

265.197/813 E - Closure

At closure, all HW will be removed from tanks, discharge control equipment and discharge confinement structures.

265.198/813 F - Special Requirements for Ignitable or Reactive Wastes

Does not apply.

LIST OF DEFICIENCIES

Eli Lilly Industries, Inc.

1. Rule 808 (C) of RCHNSW and 40 CFR 265.16 (d)

These rules require that a Hazardous Waste Generator must developed a training Program. This program must include, at least, instructions which teaches facility personnel the hazardous waste management procedures and must be designed to ensure that the personnel is able to respond effectively to emergencies. Annual reviews of the training must be conducted and written evidence must be kept. At the time of the inspection it was found that company has not developed training program yet (written evidence).

2. Rule 810 (G) of RCHNSW and 40 CFR 265.37

This rule requires that copy of the Contingency Plan must be submitted to the local agencies (Police, Fire Department, Hospital, Civil Defense, etc.). At the time of the inspection evidence of this was not showned.

3. Rule 207 of RCHNSW and 40 CFR 265.72

This rule requires that the owner or operator has already prepared an emergency or Contingency Plan for the hazardous waste management, sufficient to comply with the requirements of the H.W. Regulation. At the time of the inspection the Emergency Coordinator and Emergency Alternate were not indicated in the Contingency Plan.

4. Rule 803 D of RCHNSW and 40 CFR 265.14

Require a sign with the legend, "Danger - Unauthorized Personnel Keep Out" must be posted at each entrance to the active portion, in sufficient numbers to be seen from any approach to the active portion and must be legible from a distance of at least 25 feet. At the time of the inspection the signs were found deteriorated.

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental Quality Board

August 14, 1986

Mr. José J. Rivera
Engineering Manager
Eli Lilly Industries, Inc.
P. O. Box 1748
Mayaguez, Puerto Rico 00708

Dear Mr. Rivera:

Reference is made to the Full RCRA Generator and TSD Facility Inspection performed to you company on June 30, 1986.

During the inspection, several deficiencies to the requirements of the Regulation for the Control of Hazardous and Non-Hazardous Solid Wastes and Federal Regulation, 40 CFR Parts 262 and 265 were found. Enclosed, please find the list of deficiencies.

It is requested that within thirty (30) calendar days of the receipt of this letter, your company send a letter, to this office outlining the remedial actions taken to correct the deficiencies found (Class II Violations).

If you have any questions about this matter, please contact Ms. Damaris Maldonado, of my staff at: (809) 722-0437.

Cordially yours,

Carlos R. Vázquez Ayala
Director
Land Pollution Control Area

CRVA/smm